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FILE 'REGISTRY' ENTERED AT 14:51:33 ON 16 JUL 2009
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FILE 'REGISTRY' ENTERED AT 09:59:05 ON 16 JUL 2009
               E EPIFLUOROHYDRIN/CN
L1
              1 S E3
               E EPICHLOROHYDRIN/CN
L2
              1 S E3
               E EPIBROMOHYDRIN/CN
              1 S E3
L3
               E EPIIODOHYDRIN/CN
L4
             1 S E3
               E BENZYLAMINE/CN
L5
              1 S E3
                E BIS(2-AMINOETHYL)ETHER/CN
     FILE 'HCAPLUS' ENTERED AT 10:05:27 ON 16 JUL 2009
L6
          28717 S WOLF ?/AU
L7
           265 S HUFFER ?/AU
           5407 S DECKER ?/AU
L8
L9
           436 S SCHERR ?/AU
L10
           2757 S REESE ?/AU
L11
              0 S L6 AND L7 AND L8 AND L9 AND L10
L12
             1 S L6 AND L7
L13
             16 S L6 AND L8
             4 S L6 AND L9
L14
L15
             8 S L6 AND L10
             0 S L7 AND L8
L16
L17
             0 S L7 AND L9
L18
             1 S L7 AND L10
              3 S L8 AND L9
L19
L20
             3 S L8 AND L10
L21
             11 S L9 AND L10
L22
         50748 S LEATHER?
L23
             7 S (L12-L21) AND L22
L24
          19381 S L2
L25
              0 S (L12-L21) AND L24
                SEL L23 1-7 RN
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FILE 'REGISTRY' ENTERED AT 10:09:51 ON 16 JUL 2009

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L26
             28 S E1-E28
L27
              9 S L26 AND N/ELS
                E ETHER, BIS(2-AMINOETHYL)/CN
     FILE 'HCA' ENTERED AT 10:14:55 ON 16 JUL 2009
            220 S (BIS(3A) AMINOETHYL(3A) ETHER#)/IT
L28
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L29
              1 S 2752-17-2
                E N, N-DIMETHYLETHYLENEDIAMINE/CN
L30
              1 S E3
               E PIPERAZINE/CN
L31
              1 S E3
                E ETHYLENEDIAMINE/CN
              1 S E3
L32
                E N, N-DIMETHYLAMINOPROPYLAMINE/CN
                E N, N-DIMETHYLAMINOPROPYL AMINE/CN
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            794 S DIMETHYLAMINOPROPYLAMINE#/IT
L33
     FILE 'REGISTRY' ENTERED AT 10:24:38 ON 16 JUL 2009
L34
              1 S 109-55-7
     FILE 'REGISTRY' ENTERED AT 10:26:19 ON 16 JUL 2009
                E METHYLBIS (3-AMINOPROPYL) AMINE/CN
L35
              1 S E3
L36
              1 S 841312-89-8
                E METHYLBIS (2-AMINOETHYL) AMINE/CN
               E 1,2-ETHANEDIAMINE, N1-(2-AMINOETHYL)-N1-METHYL-/CN
              1 S E3
L37
                E N-(2-AMINOETHYLPIPERAZINE)/CN
                E N-(2-AMINOETHYL) PIPERAZINE/CN
              1 S E3
L38
                E N-AMINOETHYLPIPERAZINE/CN
                E N-AMINOETHYL PIPERAZINE/CN
                E PIPERAZINE, N-AMINOETHYL-/CN
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L39
            346 S AMINOETHYLPIPERAZINE#/IT
L40
          26077 S EPICHLOROHYDRIN#/IT
             13 S L39 AND L40
L41
     FILE 'REGISTRY' ENTERED AT 10:39:43 ON 16 JUL 2009
L42
              1 S 140-31-8
L43
              1 S L42 AND L38
                E N-(1-AMINOETHYL) PIPERAZINE/CN
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E PIPERAZINE, N-(1-AMINOETHYL)/CN

	FILE	'LRECI	STRY' ENTERED AT 10:44:53 ON 16 JUL 2009
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L45			
L46		U	S L44 FUL
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L47		1	S L44
L48		1	S 141656-32-8
			E DIETHYLENETRIAMINE/CN
L49		1	S E3
L50		2	E DIPROPYLENETRIAMINE/CN S E3
ГЭ0		3	E TRIETHYLENETETRAMINE/CN
L51		1	S E3
		_	E 4,7-DIMETHYLTRIETHYLENETETRAMINE/CN
L52			S E4
L53		1	S 7382-58-3
		_	E DIMETHYLAMINOPROPYLAMINE/CN
L54			S E4
L55		1	S 109-55-7
		-	E TETRAETHYLENEPENTAMINE/CN
L56			S E3
L57		4	S L1-L4
			SEL L57 1-4 RN
.		00540	EDIT E1-E4 /BI /CRN
L58		28549	S E1-E4
			SEL L5 1 RN
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L59		1606	
			SEL L29 1 RN
L60		70	EDIT E6 /BI /CRN S E6
гоо		70	
			SEL L30 RN EDIT E7 /BI /CRN
L61		110	S E7
ПОТ		110	SEL L31 1 RN
			EDIT E8 /BI /CRN
L62		3789	
ПОС		3703	SEL L32 RN
			EDIT E9 /BI /CRN
L63		8769	
100		5,05	SEL L34 RN
			EDIT E10 /BI /CRN
L64		577	S E10
		J . ,	SEL L35 RN
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L78 L79 L80 C8 L59 C8 AND L64 L80 C9 S L59 AND L65 L81 C9 S L59 AND L66 L82 C9 S L59 AND L67 L83 C9 S L59 AND L68 L84 C9 S L59 AND L69 L85 C9 S L59 AND L70 L86 C9 S L59 AND L71 L87 C9 S L59 AND L72 L88 C9 S L59 AND L73 L89 C9 S L60 AND L61 L91 C9 S L60 AND L62	L76	0	S L59 AND L61
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L84	L82	0	S L59 AND L67
L84	L83	0	S L59 AND L68
L85			
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L88			
L89 0 S L59 AND L74 L90 0 S L60 AND L61 L91 0 S L60 AND L62			
L90 0 S L60 AND L61 L91 0 S L60 AND L62	L88	2	S L59 AND L73
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L95 0 S L60 AND L67 L97 0 S L60 AND L67 L97 0 S L60 AND L69 L99 0 S L60 AND L70 L100 0 S L60 AND L71 L101 0 S L60 AND L72 L102 0 S L60 AND L73 L103 0 S L60 AND L73 L103 0 S L61 AND L62 L104 0 S L61 AND L62 L105 5 S L61 AND L62 L106 0 S L61 AND L62 L107 0 S L61 AND L65 L108 0 S L61 AND L67 L109 0 <t< td=""><td></td><td></td><td></td><td></td><td></td><td></td></t<>						
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L107						
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L114 0 S L61 AND L72 L115 0 S L61 AND L73 L116 0 S L61 AND L74 L117 87 S L62 AND L63 L118 3 S L62 AND L64 L119 1 S L62 AND L65 L120 0 S L62 AND L66 L121 13 S L62 AND L67 L122 0 S L62 AND L67 L123 55 S L62 AND L70 L124 1 S L62 AND L70 L125 7 S L62 AND L71 L126 0 S L62 AND L72 L127 3 S L62 AND L74 L129 5 S L63 AND L65 L131 0 S L63						
L115 0 S L61 AND L73 L116 0 S L61 AND L74 L117 87 S L62 AND L63 L118 3 S L62 AND L64 L119 1 S L62 AND L65 L120 0 S L62 AND L66 L121 13 S L62 AND L67 L122 0 S L62 AND L67 L123 55 S L62 AND L70 L124 1 S L62 AND L70 L125 7 S L62 AND L71 L126 0 S L62 AND L72 L127 3 S L62 AND L74 L128 3 S L62 AND L74 L130 20 S L63 AND L65 L131 0 S L63 <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>						
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USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.
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=> D L258 1-9 BIB ABS HITSTR HITRN RE

L258 ANSWER 1 OF 9 HCA COPYRIGHT 2009 ACS on STN

AN 144:53259 HCA Full-text

TI Pigment coated paper base and printing paper prepared thereby

IN Naito, Jun

PA Fuji Photo Film B.V., Neth.

SO PCT Int. Appl., 26 pp.

CODEN: PIXXD2

DT Patent

LA English

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
ΡΙ	WO 2005118953	A1	20051215	WO 2005-NL403	200506 03

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PRAI EP 2004-76658
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WO 2005-NL403 W 20050603 A pigment coated paper base is composed of a paper base and a water-AΒ based pigmented hydrophilic coating contq. an alkyl ketene dimer and an epoxidized fatty acid amide as sizing agent, and the coating comprises pigment selected from CaCO3, TiO2, BaSO4, clay, magnesiumaluminum silicate, and styrene-acrylic copolymer, while the binder is selected from styrene-butadiene rubber, Me methacrylate-butadiene rubber, polyacrylate rubber, styrene-acrylic rubber, polyvinyl alc., polysaccharides, and starch. Printing paper comprising the above pigment coated paper and polymer layers made from polyethylene, polypropylene, or polymethyl methacrylate, is also provided. paper base was prepd. using epoxidized fatty acid amide and alkyl ketene dimer as internal sizing agent and coated with CaCO3, and then melt co-extrusion coated with a coating comprising LDPE, LLDPE, and TiO2 on one side, and coated with a compn. contg. LDPE and HDPE on the backside.

IT 871245-48-6D, Diethylenetriamine-epichlorohydrintriethylenetetramine copolymer, reaction products with behenic acid (pigment coated paper base for printing paper)

RN 871245-48-6 HCA

CN 1,2-Ethanediamine, N,N'-bis(2-aminoethyl)-, polymer with N-(2-aminoethyl)-1,2-ethanediamine and (chloromethyl)oxirane (9CI) (CA INDEX NAME)

CRN 112-24-3 CMF C6 H18 N4

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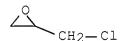
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CM 3

CRN 106-89-8 CMF C3 H5 Cl O



IT 871245-48-6D, Diethylenetriamine-epichlorohydrintriethylenetetramine copolymer, reaction products with behenic acid (pigment coated paper base for printing paper)

RE

- (1) Fuji Photo Film B V; EP 0952483 A 1999 HCA
- (2) Kerkhoff; US 4808267 A 1989 HCA
- (3) Tamagawa; US 5474856 A 1995 HCA
- (4) Uno; US 4994357 A 1991 HCA

L258 ANSWER 2 OF 9 HCA COPYRIGHT 2009 ACS on STN

- AN 142:263510 HCA Full-text
- TI Surface treatment of semifinished leather with cationic or amphoteric polymers
- IN Wolf, Gerhard; Hueffer, Stephan; Reese, Oliver; Decker, Juergen; Igl, Georg; Schroeder, Stefan; Scherr, Guenter

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PA
     BASF Aktiengesellschaft, Germany
SO
     PCT Int. Appl., 20 pp.
     CODEN: PIXXD2
DT
     Patent
LA
     German
FAN.CNT 1
     PATENT NO.
                        KIND
                                DATE
                                          APPLICATION NO.
                                                                   DATE
    WO 2005017210
                                20050224
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                         A1
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PRAI DE 2003-10336453 A 20030806 <-- WO 2004-EP8607 W 20040730 <--

OS MARPAT 142:263510

AB The surface of semifinished leather is treated with a cationic or amphoteric aq. treating agent, e.g., an amine-epichlorohydrin copolymer by roll coating, roller application, and/or spraying and the leather is then treated with an anionic agent, e.g., a dye, fatliquoring agent or after-tanning agent, in a drum. The procedure serves to improve leather fastness, to produce 2-color effect on leather, to reduce dye consumption, etc.

IT 841312-89-89, Benzylamine-N, N-dimethyl-1, 3-propanediamine-Epichlorohydrin copolymer

(treatment of semifinished leather surfaces with cationic or amphoteric polymers)

RN 841312-89-8 HCA

CN 1,3-Propanediamine, N,N-dimethyl-, polymer with benzenemethanamine and (chloromethyl)oxirane (9CI) (CA INDEX NAME)

CM 1

CRN 109-55-7 CMF C5 H14 N2

 $H_2N-(CH_2)_3-NMe_2$

CM 2

CRN 106-89-8 CMF C3 H5 C1 O

O CH2-C1

CM 3

CRN 100-46-9 CMF C7 H9 N IT 841312-89-8P, Benzylamine-N,N-dimethyl-1,3-propanediamine-Epichlorohydrin copolymer (treatment of semifinished leather surfaces with cationic or amphoteric polymers)

RE

- (1) Anon; PATENT ABSTRACTS OF JAPAN 1998, V1998(04)
- (2) Benckiser Knapsack Gmbh; DE 3530478 A 1987 HCA
- (3) Buckman Labor Inc; DE 2616220 A 1976 HCA
- (4) Nikka Chem Co Ltd; JP 9324372 A 1997
- (5) White, G; GB 419941 A 1934 HCA
- L258 ANSWER 3 OF 9 HCA COPYRIGHT 2009 ACS on STN

GW, ML, MR, NE, SN, TD, TG

- AN 142:221588 HCA Full-text
- TI Epichlorohydrin amine polymers used for treating the surface of leather.
- IN Wolf, Gerhard; Hueffer, Stephan; Decker, Juergen; Scherr, Guenter;
 Reese, Oliver
- PA BASF Aktiengesellschaft, Germany
- SO PCT Int. Appl., 18 pp.

CODEN: PIXXD2

DT Patent

LA German

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE	
ΡΙ	 WO 2005014687	A1	20050217	WO 2004-EP8873	200408	

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RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ,

DE	10336452	A1	20050303	DE 2003-10336452	200308
EP	1651699	A1	20060503	< EP 2004-763901	06
				<	200408 06
EP	1651699	R1	20070110	`	
ш	R: AT, BE,	CH, DE,	DK, ES, FR,	GB, GR, IT, LI, LU, NI BG, CZ, EE, HU, PL, SK	
CN	· ·		·	CN 2004-80022277	
CIV	1032370	7.7	20000313	CIN 2001 00022277	200408 06
				<	
	100379787				
BR	2004013268	A	20061010	BR 2004-13268	
					200408 06
~	0050400		0000000	<	
ES	2279420	Т3	20070816	ES 2004-763901	000400
					200408 06
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US	20090094758	A1	20090416	US 2006-566375	200601 30
				<	
	2003-10336452			<	
	2004-EP8873		20040806	<	
70 -					1

PRAI

AΒ An aq. soln. of an epichlorohydrin amine polymer (prepd. by reacting ≥2 amines with ≥1 epichlorohydrin deriv.) at amine/epichlorohydrin ratios (0.8:1.2) - (1.0:1.0) is used for treating the surface of semifinished leather products and textile materials. A typical example of such copolymer prepd. by reacting 1,020 g of dimethylaminopropylamine, 267.5 g of benzylamine and 931 mL of epichlorohydrin in 1,519.1 g of water 2 h at 85° exhibits a solid content 21%, viscosity 32 mPa s and chloride content 1.19 mmol/q. 841312-89-8P ΙT

(ag. soln. of an epichlorohydrin amine polymer for treating the surface of semifinished leather products and textile materials) 841312-89-8 HCA

1,3-Propanediamine, N,N-dimethyl-, polymer with benzenemethanamine CN and (chloromethyl)oxirane (9CI) (CA INDEX NAME)

CM1

RN

CRN 109-55-7 CMF C5 H14 N2

 $H_2N-(CH_2)_3-NMe_2$

CM 2

CRN 106-89-8 CMF C3 H5 C1 O

CH₂-Cl

CM 3

CRN 100-46-9 CMF C7 H9 N

 H_2N-CH_2-Ph

IT 841312-89-8P

(aq. soln. of an epichlorohydrin amine polymer for treating the surface of semifinished leather products and textile materials)

RE

- (1) Buckman Labor Inc; EP 0431739 A 1991 HCA
- (2) Buckman Labor Inc; WO 9728687 A 1997 HCA
- (3) Canon Kk; EP 0738608 A 1996 HCA
- (4) Dixon, K; US 3738945 A 1973 HCA
- (5) Ray-Chaudhuri, D; US 3573095 A 1971

L258 ANSWER 4 OF 9 HCA COPYRIGHT 2009 ACS on STN

- AN 133:94634 HCA Full-text
- TI Amine condensation polymer bile acid sequestrants
- IN Huval, Chad C.; Holmes-Farley, Stephen Randall; Whitesides, George M.

```
SO
     PCT Int. Appl., 26 pp.
     CODEN: PIXXD2
DT
     Patent
LA
     English
FAN.CNT 1
     PATENT NO.
                        KIND
                               DATE
                                          APPLICATION NO.
                                                                   DATE
    WO 2000038664
                        A2
                               20000706
                                          WO 1999-US30469
PΙ
                                                                   199912
                                                                   20
                                                 <--
                                20010726
     WO 2000038664
                         А3
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             CU, CZ, DE, DK, DM, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU,
             ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT,
             LU, LV, MA, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU,
             SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, UZ, VN,
             YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
         RW: GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY,
             DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF,
             BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG
PRAI US 1998-219558
                               19981223 <--
                         A
AB
     A method for binding bile salts in a mammal, comprising the step of
     administering to the mammal a therapeutically effective amt. of one
     or more amine polymers prepd. by the process comprising the step of
     reacting a substituted or unsubstituted aliph., arom. or aralkyl
     bifunctional electrophile with at least one monomer comprising a
     substituted or unsubstituted hydrophobic moiety and a single
     nucleophilic substituent which is multireactive. A bile acid
     sequestrant was prepd. from dodecyolamine, epichlorohydrin and 1,12-
     diaminododecane.
ΙT
     280559-17-3P
        (amine condensation polymer bile acid sequestrants)
RN
     280559-17-3 HCA
     1,3-Propanediamine, N,N-dimethyl-, polymer with
CN
     N-(2-aminoethyl)-N'-[2-[(2-aminoethyl)amino]ethyl]-1,2-ethanediamine
     and (chloromethyl) oxirane (9CI) (CA INDEX NAME)
     CM
          1
     CRN 112-57-2
     CMF C8 H23 N5
```

H2N-CH2-CH2-NH-CH2-CH2-NH-CH2-CH2-NH-CH2-CH2-NH-CH2-CH2-NH2

Geltex Pharmaceuticals, Inc., USA

PA

CM 2

CRN 109-55-7 CMF C5 H14 N2

 $H_2N-(CH_2)_3-NMe_2$

CM 3

CRN 106-89-8 CMF C3 H5 C1 O

IT 280559-14-0P

(amine condensation polymer bile acid sequestrants)

RN 280559-14-0 HCA

CN 1,2-Ethanediamine, N-(2-aminoethyl)-N'-[2-[(2-aminoethyl)amino]ethyl]-, polymer with (chloromethyl)oxirane and 1-piperazineethanamine (9CI) (CA INDEX NAME)

CM 1

CRN 140-31-8 CMF C6 H15 N3

CM 2

CRN 112-57-2 CMF C8 H23 N5

H2N-CH2-CH2-NH-CH2-CH2-NH-CH2-CH2-NH-CH2-CH2-NH-CH2-NH2-

CM 3

CRN 106-89-8 CMF C3 H5 C1 O

CH2-Cl

IT 280559-17-3P

(amine condensation polymer bile acid sequestrants)

IT 280559-14-0P

(amine condensation polymer bile acid sequestrants)

RE

- (1) Anon; WO 9404596 A1 HCA
- (2) Anon; WO 9519384 A1 HCA

L258 ANSWER 5 OF 9 HCA COPYRIGHT 2009 ACS on STN

AN 131:279320 HCA Full-text

- TI Waterproof-improving agent for ink jet printing paper and ink jet printing paper
- IN Kinoshita, Hiroki; Takahashi, Toshiaki; Yamada, Masao; Gensho, Toshio
- PA Nikka Chemical Industry Co., Ltd., Japan
- SO Jpn. Kokai Tokkyo Koho, 12 pp. CODEN: JKXXAF

DT Patent

LA Japanese

FAN.CNT 1

PATENT NO. KIND DATE APPLICATION NO. DATE

<--

PRAI JP 1998-87220

19980331 <--

AB The title waterproof-improving agent contains a cationic resin having a structure [N+R1R2R5N+R3R4CH2CH(OH)CH2]n.2X- [R1-4 = H, C1-4 alkyl, benzyl; R5 = C1-6 alkylene, phenylene, (R6NR8R7)m (R6, R7 = C1-4 alkylene, phenylene; R8 = H, C1-4 alkyl, benzyl); m = 1-4; X- = halo ion; n = 3-30] which is prepd. by reaction of an amine compd. having ≥2 amino groups with an epihalohydrin. An ink jet printing paper is also claimed, which is obtained by coating the agent. The printing paper provides a high quality image with improved water resistance and without ink blotting.

IT 245677-39-8P, Epichlorohydrin-ethylenediaminetriethylenetetramine copolymer

A

(ink-jet printing paper coated with cationic resin
waterproof-improving agent)

RN 245677-39-8 HCA

CN 1,2-Ethanediamine, N,N'-bis(2-aminoethyl)-, polymer with (chloromethyl)oxirane and 1,2-ethanediamine (9CI) (CA INDEX NAME)

CM 1

CRN 112-24-3 CMF C6 H18 N4

H2N-CH2-CH2-NH-CH2-CH2-NH-CH2-CH2-NH2

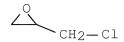
CM 2

CRN 107-15-3 CMF C2 H8 N2

H2N-CH2-CH2-NH2

CM 3

CRN 106-89-8



IT 245677-39-89, Epichlorohydrin-ethylenediaminetriethylenetetramine copolymer (ink-jet printing paper coated with cationic resin waterproof-improving agent)

L258 ANSWER 6 OF 9 HCA COPYRIGHT 2009 ACS on STN

AN 119:210184 HCA Full-text

OREF 119:37311a,37314a

TI Prevention of marine biofouling

IN Ikuta, Sunao; Kajiwara, Shoichiro; Yasunaga, Tooru; Nishimura, Kunio

PA Mitsubishi Gas Chemical Co., Japan; Katayama Chemical Works Co

SO Jpn. Kokai Tokkyo Koho, 8 pp.

CODEN: JKXXAF

DT Patent

LA Japanese

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 05038490	A	19930219	JP 1991-199092	199108 08

<--

JP 3126423 B2 20010122 PRAI JP 1991-199092 19910808 <--

AB Compds. supplying H202 and water-sol. cation polymers prepd. by treating polyamines R1R2N(ANR3)nR4 (R1-4 = H, C1-3 alkyl; A = C1-5 linear or branched alkylene; n = 1-5) with epihalohydrins or dihalogenoethyl ethers are added to seawater cooling system. Since low concn. use of the agents effectively controls biofouling, the water is not polluted.

IT 150673-03-3

(biofouling control agents contg., prepn. of, for seawater cooling system)

RN 150673-03-3 HCA

CN 1,2-Ethanediamine, N,N'-bis(2-aminoethyl)-, polymer with (chloromethyl)oxirane and N,N-dimethyl-1,2-ethanediamine (9CI) (CA INDEX NAME)

CM 1

CRN 112-24-3 CMF C6 H18 N4

H2N-CH2-CH2-NH-CH2-CH2-NH-CH2-CH2-NH2

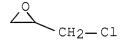
CM 2

CRN 108-00-9 CMF C4 H12 N2

Me2N-CH2-CH2-NH2

CM 3

CRN 106-89-8 CMF C3 H5 Cl O



IT 150673-03-3

(biofouling control agents contg., prepn. of, for seawater cooling system)

L258 ANSWER 7 OF 9 HCA COPYRIGHT 2009 ACS on STN

AN 112:57419 HCA Full-text

OREF 112:9873a,9876a

TI Nitrogen-containing water-soluble polymer flocculants

IN Delcour, Kees

PA Dow Chemical Co., USA

SO U.S., 5 pp. CODEN: USXXAM

DT Patent LA English

FAN.CNT 1

PATENT NO. KIND DATE APPLICATION NO. DATE PI US 4647379 A 19870303 US 1985-797571 198511

13

<--

PRAI US 1985-797571

19851113 <--

AΒ The title flocculants are prepd. without gelation by addn. of epihalohydrins to piperazine (I) in the absence of strong bases to form water-sol. prepolymers, which are reacted with a polyamine in the absence of strong base. Epichlorohydrin (II) was added dropwise to a 60° aq. soln. of I to 1.1:1 II-I with temp. controlled at .apprx.100° and stirred 2 h to give a prepolymer, which was reacted with an aq. soln. of a pentaethylenehexamine-hexaethyleneheptamine mixt. to prepolymer/polyamine ratio 6.8. An aq. suspension (500 mL) of kaolin was flocculated with 0.5 mL of a 1% soln. of the polymer, giving a clear water layer with some floating particles.

ΙΤ 70739-85-4P

(prepn. of water-sol., in 2 steps, as flocculant)

RN 70739-85-4 HCA

1,2-Ethanediamine, N,N'-bis(2-aminoethyl)-, polymer with CN (chloromethyl)oxirane and piperazine (9CI) (CA INDEX NAME)

CM

CRN 112-24-3 CMF C6 H18 N4

H2N-CH2-CH2-NH-CH2-CH2-NH-CH2-CH2-NH2

CM 2

CRN 110-85-0 CMF C4 H10 N2

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HNNH
```

CM 3

CRN 106-89-8

CMF C3 H5 C1 0

70739-85-4P

CH2-Cl

ΙT

(prepn. of water-sol., in 2 steps, as flocculant) RE (1) Anon; US 3391090 A (2) Anon; US 3523892 A (3) Anon; US 3917817 A HCA (4) Anon; US 3953330 A HCA (5) Anon; US 4129528 A HCA (6) Anon; US 4328142 A HCA (7) Anon; US 4482667 A HCA L258 ANSWER 8 OF 9 HCA COPYRIGHT 2009 ACS on STN ΑN 91:40164 HCA Full-text OREF 91:6561a,6564a ΤI Reactivity of polyethylene polyamines in the synthesis of anion exchangers of aminoepoxide type Chetverikova, A. T.; Chetverikov, A. F.; Vakulenko, V. A.; ΑU Polikarpenko, V. P.; Pashkov, A. B. CS USSR Plasticheskie Massy (1979), (5), 6-8 SO CODEN: PLMSAI; ISSN: 0554-2901 Journal DT Russian LA AB The purity of polyethylenepolyamine (I) (ammonia-ClCH2CH2Cl reaction product) affects the gelation time (τ) of epichlorohydrin-

polyethylenepolyamine copolymer (AN 31G) ion exchanger.

 τ (\leq 60 min) is obtained for epichlorohydrin-ethylenediamine copolymer

The shortest

[25014-13-5] (model compd. for AN 31G) and for copolymers prepd. from I contg. high concns. of oligomeric amines. The longest τ (>4000 min) is obtained for epichlorohydrin-1,2-bis(dimethylamino)ethane copolymer [25988-98-1] and 1,4-diethylpiperazine-epichlorohydrin copolymer [70739-82-1] model compds.

IT 70739-85-4

(gelation time of, as ion exchanger model compd.)

RN 70739-85-4 HCA

CN 1,2-Ethanediamine, N,N'-bis(2-aminoethyl)-, polymer with (chloromethyl)oxirane and piperazine (9CI) (CA INDEX NAME)

CM 1

CRN 112-24-3 CMF C6 H18 N4

 $H_2N-CH_2-CH_2-NH-CH_2-CH_2-NH-CH_2-CH_2-NH_2$

CM 2

CRN 110-85-0 CMF C4 H10 N2

CM 3

CRN 106-89-8 CMF C3 H5 Cl O

L258 ANSWER 9 OF 9 HCA COPYRIGHT 2009 ACS on STN

AN 81:68354 HCA Full-text

OREF 81:10867a,10870a

TI Compositions for treatment and conditioning of the hair

IN Vanlerberghe, Guy; Sebag, Henri

PA Oreal S. A.

SO Fr. Demande, 26 pp.

CODEN: FRXXBL

DT Patent

LA French

FAN.CNT 2

FAN.	CNT 2 PATENT NO.	KIND	DATE	APPLICATION NO.	DATE -
ΡI	 FR 2162025	A1	19730713	FR 1972-42279	197211
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	FR 2162025	В1	19760130	<	
	NL 7216145	A		NL 1972-16145	
					197211 28
				<	
	NL 176223	В	19841016		
	NL 176223	С			
	DE 2258222	A1	19730614	DE 1972-2258222	197211
				<	28
	DE 2258222	В2	19820204	<u> </u>	
	DE 2258222	C3	19820923		
	BR 7208360	D0	19730830	BR 1972-8360	
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	JP 48075732	A	1 9731012	JP 1972-119293	107011
					197211 28
	TD 60005410		10050610	<	
	JP 60025410 AU 7249349	B A	19850618 19740530	AU 1972-49349	
	AU /243343	A	19/40000	AU 1372-43343	197211 28

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								19 7 211 28
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	US	3917817	A	19751104	US	1972-310088		
								19 7 211 28
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	GB	1416454	A	19751203	GB	1972-54983		
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								197211
						<		28
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		134141	В		DK	1972-5945		
	DIC	134141	Б	19700920	DI	1972 3943		197211
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	US	4013787	A	19770322	US	1975-600188		
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						<		29
DDAT	ттт	1971-64371	A	19711129	/	<		
LIMI		1972-310088		19711129				
		1974-27030		19740802				
AB		e active hair cond				ow-mol w+	(1 000-15	5 000)

The active hair conditioning agents are low-mol. wt. (1,000-15,000), film-forming, cationic copolymers of piperazine and one or two straight- or branched-chain substituted or unsubstituted (<C8) alkenes, e.g., epichlorohydrin, benzylamine. They can be used in compns. of pH 3-11 in the form of free bases, salts, quaternary compds., or oxidn. products. Concns. of 0.2-3% can be used in lotions, creams, and shampoos and as adjuvants in many hair cosmetics.

IT 52848-29-0P

(prepn. of)

RN 52848-29-0 HCA

CN Piperazine, polymer with benzenemethanamine and (chloromethyl)oxirane (9CI) (CA INDEX NAME)

CM 1

CRN 110-85-0 CMF C4 H10 N2

CM 2

CRN 106-89-8 CMF C3 H5 C1 O

CM 3

CRN 100-46-9 CMF C7 H9 N

 H_2N-CH_2-Ph

IT 52848-29-0P (prepn. of)

(CITATIONS BELOW HAVE ALL OF THE RECITED INGREDIENTS INCLUDING AT LEAST TWO DIFFERENT AMINES, BUT CANNOT GUARANTEE THAT TWO DIFFERENT AMINES ARE BOTH SIMULTANOUSLY IN THE REACTION MIXTURE WITH THE EPICHLORHYDRIN--THAT MAY BE OR MAY NOT BE TRUE DEPENDING ON THE SPECIFIC WORDING IN THE CITATION.)

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L276 ANSWER 1 OF 35
                     HCA COPYRIGHT 2009 ACS on STN
AN
     145:489940
                 HCA
                      Full-text
     Dendritic polymers with enhanced amplification and
ΤI
     interior functionality for use in various applications, such as drug
     delivery, transfection, and diagnostics
     Tomalia, Donald A.; Swanson, Douglas R.; Huang, Baohua; Pulgam,
IN
     Verra Reddy; Heinzelmann, Joseph R.; Svenson, Sonke; Reyna, Lori A.;
     Zhuravel, Michael A.; Chauhan, Abhay Singh; Demattei, Cordell R.
     Dendritic Nanotechnologies, Inc., USA
PA
SO
     PCT Int. Appl., 306 pp.
     CODEN: PIXXD2
DT
     Patent
LA
     English
FAN.CNT 2
     PATENT NO.
                         KIND
                                DATE
                                            APPLICATION NO.
                                                                   DATE
                                            _____
     _____
                         ____
     _____
                                            WO 2005-US47635
PΙ
     WO 2006115547
                          Α2
                                20061102
                                                                   200512
                                                                   21
     WO 2006115547
                          А3
                                20090604
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             GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM,
             KN, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, LY, MA, MD, MG,
             MK, MN, MW, MX, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT,
             RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR,
             TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW
         RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU,
             IE, IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR,
             BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE,
             TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG,
             ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AP, EA, EP, OA
     WO 2006065266
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                                         WO 2005-US13864
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     WO 2006065266
                          А3
                                20060914
     WO 2006065266
                          Α9
                                20061221
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             CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI,
             GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM,
             KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN,
             MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC,
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									RU,			,	,	,	,	,	,
	ΑU	2005	3310.	23		A1		2006	1102	1	AU 2	005-	3310	23			
																	00512
	C1 7	0500	120			7. 1		2006	1100		C 7 0	005	2500	120		2	1
	CA	2598	430			Al		2006	1102	(CA Z	005-	2598	430		2	00512
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	EP	1877:	103			A2		2008	0116]	EP 2	005-	8578	43		۷.	±
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AB Dendritic polymers with enhanced amplification and interior functionality for use in deemulsifiers, wet strength agents, proton scavengers, calibration stds., size selective membranes, paint additives, drug delivery, transfection, and diagnostics are prepd. by

use of fast, reactive ring-opening chem. combined with the use of branch cell reagents in a controlled way to rapidly and precisely build dendritic structures, generation by generation, with cleaner chem., often single products, lower excesses of reagents, lower levels of diln., and lower cost.

IT 106-89-8, Epichlorohydrin, reactions 107-15-3,
Ethylene diamine, reactions 110-85-0, Piperazine,
reactions 111-40-0, Diethylenetriamine 140-31-8,
N-(2-Aminoethyl)piperazine 140-31-8D, 1-(2-Aminoethyl)
piperazine, reaction products with dendrimers
RL: RCT (Reactant); RACT (Reactant or reagent)
(dendritic polymers with enhanced amplification and
interior functionality for use in various applications, such as
deemulsifiers, drug delivery, transfection, and diagnostics)

RN 106-89-8 HCA CN Oxirane, 2-(chloromethyl)- (CA INDEX NAME)

RN 107-15-3 HCA CN 1,2-Ethanediamine (CA INDEX NAME)

H2N-CH2-CH2-NH2

RN 110-85-0 HCA CN Piperazine (CA INDEX NAME)

$$\bigcup_{H \in \mathcal{N}} N H$$

RN 111-40-0 HCA CN 1,2-Ethanediamine, N1-(2-aminoethyl)- (CA INDEX NAME)

H2N-CH2-CH2-NH-CH2-CH2-NH2

RN 140-31-8 HCA CN 1-Piperazineethanamine (CA INDEX NAME)

RN 140-31-8 HCA CN 1-Piperazineethanamine (CA INDEX NAME)

CC 37-3 (Plastics Manufacture and Processing)
 Section cross-reference(s): 63

ST polymer dendritic prepn; dendrimer drug delivery transfection diagnostics

IT Inks

(Electronic; dendritic polymers with enhanced amplification and interior functionality for use in electronic inks)

IT Polyethers

RL: IMF (Industrial manufacture); RCT (Reactant); PREP (Preparation); RACT (Reactant or reagent) (azide group-contg., dendritic; dendritic polymers with enhanced amplification and interior functionality for use in eukaryotic cells transfecting)

IT Ions

(carrier; dendritic polymers with enhanced amplification and interior functionality for use as metal ion carriers)

IT Drug delivery systems

(carriers; dendritic polymers with enhanced amplification and interior functionality for use in various applications, such as deemulsifiers, drug delivery, transfection,

and diagnostics) ΙT Medical goods (catheters; dendritic polymers with enhanced amplification and interior functionality for use in catheters) Dental materials and appliances ΙT (composites; dendritic polymers with enhanced amplification and interior functionality for use in dental compn.) ΙT Catalyst supports (dendritic polymers with enhanced amplification and interior functionality for use as catalyst carriers) ΙΤ Quantum dot devices (dendritic polymers with enhanced amplification and interior functionality for use as quantum dots) ΙT Adhesives (dendritic polymers with enhanced amplification and interior functionality for use in adhesives) Antibacterial agents ΙT (dendritic polymers with enhanced amplification and interior functionality for use in antibacterials) Biomarkers ΙT (dendritic polymers with enhanced amplification and interior functionality for use in biomarkers) Carpets ΙT (dendritic polymers with enhanced amplification and interior functionality for use in carpets) Ceramics ΙT (dendritic polymers with enhanced amplification and interior functionality for use in ceramics) ΙT Textiles (dendritic polymers with enhanced amplification and interior functionality for use in cloth) ΙT Coating materials (dendritic polymers with enhanced amplification and interior functionality for use in coatings) Cosmetics ΙΤ (dendritic polymers with enhanced amplification and interior functionality for use in cosmetics) Deodorants ΙT (dendritic polymers with enhanced amplification and interior functionality for use in deodorants) Disinfectants ΙT (dendritic polymers with enhanced amplification and interior functionality for use in disinfectants) ΙT Optical imaging devices (dendritic polymers with enhanced amplification and

interior functionality for use in displays)

ΙT Electrodes (dendritic polymers with enhanced amplification and interior functionality for use in electrodes) ΙT Energy storage (dendritic polymers with enhanced amplification and interior functionality for use in energy storage) ΙΤ Eukaryota (dendritic polymers with enhanced amplification and interior functionality for use in eukaryotic cells transfecting) ΙT Fiber optics (dendritic polymers with enhanced amplification and interior functionality for use in fiber optics) Concrete ΙΤ (dendritic polymers with enhanced amplification and interior functionality for use in fiberglass) Glass fibers ΤТ RL: TEM (Technical or engineered material use); USES (Uses) (dendritic polymers with enhanced amplification and interior functionality for use in fiberglass) ΙT Fibers RL: TEM (Technical or engineered material use); USES (Uses) (dendritic polymers with enhanced amplification and interior functionality for use in fibers) ΙT Filtration (dendritic polymers with enhanced amplification and interior functionality for use in filtration) Flavoring materials ΙT (dendritic polymers with enhanced amplification and interior functionality for use in flavorings) ΙT Fuel cells (dendritic polymers with enhanced amplification and interior functionality for use in fuel cells) Glass ΙT RL: TEM (Technical or engineered material use); USES (Uses) (dendritic polymers with enhanced amplification and interior functionality for use in glass) ΙT Electric insulators (dendritic polymers with enhanced amplification and interior functionality for use in interlayer dielec.) ΙT Latex (dendritic polymers with enhanced amplification and interior functionality for use in latex) Electroluminescent devices ΙT (dendritic polymers with enhanced amplification and interior functionality for use in light emitting diodes) ΙT Magnetic memory devices (dendritic polymers with enhanced amplification and

interior functionality for use in magnetic storage systems) Medical goods ΙT (dendritic polymers with enhanced amplification and interior functionality for use in medical devices) Metals ΙT RL: TEM (Technical or engineered material use); USES (Uses) (dendritic polymers with enhanced amplification and interior functionality for use in metal) ΙT Molecular electronics (dendritic polymers with enhanced amplification and interior functionality for use in mol. electronics) ΙΤ Paper (dendritic polymers with enhanced amplification and interior functionality for use in papers) ΙT (dendritic polymers with enhanced amplification and interior functionality for use in photonics) ΙT Photoresists (dendritic polymers with enhanced amplification and interior functionality for use in photoresist) Pigments, nonbiological ΙT (dendritic polymers with enhanced amplification and interior functionality for use in pigments) ΙT Rubber RL: TEM (Technical or engineered material use); USES (Uses) (dendritic polymers with enhanced amplification and interior functionality for use in rubber) ΙT Sensors (dendritic polymers with enhanced amplification and interior functionality for use in sensors) ΙT Containers (dendritic polymers with enhanced amplification and interior functionality for use in stones) ΙT Stone (construction material) RL: TEM (Technical or engineered material use); USES (Uses) (dendritic polymers with enhanced amplification and interior functionality for use in stones) Electrophotographic toners ΙT (dendritic polymers with enhanced amplification and interior functionality for use in toners) ΙT Transistors (dendritic polymers with enhanced amplification and interior functionality for use in transistors) ΙT Dendritic polymers RL: IMF (Industrial manufacture); RCT (Reactant); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent); USES (Uses)

(dendritic polymers with enhanced amplification and interior functionality for use in various applications, such as deemulsifiers, drug delivery, transfection, and diagnostics)

IT Waveguides

(dendritic polymers with enhanced amplification and interior functionality for use in waveguides)

IT Wood

(dendritic polymers with enhanced amplification and interior functionality for use in wood)

IT Encapsulants

(drug; dendritic polymers with enhanced amplification and interior functionality for use in various applications, such as deemulsifiers, drug delivery, transfection, and diagnostics)

IT Polyethers

RL: IMF (Industrial manufacture); RCT (Reactant); PREP (Preparation); RACT (Reactant or reagent) (epoxy, dendritic; dendritic polymers with enhanced amplification and interior functionality for use in eukaryotic cells transfecting)

IT Drug delivery systems

(implants; dendritic polymers with enhanced amplification and interior functionality for use in stones)

IT Absorbents

(microwave, IR; dendritic polymers with enhanced amplification and interior functionality for use in microwave or IR absorbers)

IT Particles

(paramagnetic, carrier; dendritic polymers with enhanced amplification and interior functionality for use as paramagnetic particles carriers)

IT Semiconductor materials

(particles carriers; dendritic polymers with enhanced amplification and interior functionality for use as semiconductor particle carriers)

IT Polyamines

RL: IMF (Industrial manufacture); RCT (Reactant); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent); USES (Uses)

(polyamide-, dendrimers; dendritic polymers with enhanced amplification and interior functionality for use in eukaryotic cells transfecting)

IT Polyethers

RL: IMF (Industrial manufacture); RCT (Reactant); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent); USES (Uses)

(polyamide-, dendritic; dendritic polymers with enhanced amplification and interior functionality for use in

eukaryotic cells transfecting) Dendritic polymers ΙT RL: IMF (Industrial manufacture); RCT (Reactant); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent); USES (Uses) (polyamide-polyamines; dendritic polymers with enhanced amplification and interior functionality for use in eukaryotic cells transfecting) ΙT Polyamides RL: IMF (Industrial manufacture); RCT (Reactant); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent); USES (Uses) (polyamine-, dendrimers; dendritic polymers with enhanced amplification and interior functionality for use in eukaryotic cells transfecting) Polyesters ΤТ Polyethers RL: IMF (Industrial manufacture); RCT (Reactant); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent); USES (Uses) (polyamine-, dendritic; dendritic polymers with enhanced amplification and interior functionality for use in eukaryotic cells transfecting) Polyamines ΙT Polythioethers RL: IMF (Industrial manufacture); RCT (Reactant); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent); USES (Uses) (polyester-, dendritic; dendritic polymers with enhanced amplification and interior functionality for use in eukaryotic cells transfecting) ΙT Epoxy resins RL: IMF (Industrial manufacture); RCT (Reactant); PREP (Preparation); RACT (Reactant or reagent) (polyether-, dendritic; dendritic polymers with enhanced amplification and interior functionality for use in eukaryotic cells transfecting) ΙT Polyamides Polyamines RL: IMF (Industrial manufacture); RCT (Reactant); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent); USES (Uses) (polyether-, dendritic; dendritic polymers with enhanced amplification and interior functionality for use in eukaryotic cells transfecting) ΙT Polyesters RL: IMF (Industrial manufacture); RCT (Reactant); THU (Therapeutic

use); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent); USES (Uses) (polythioether-, dendritic; dendritic polymers with enhanced amplification and interior functionality for use in eukaryotic cells transfecting) ΙT Calibration (size; dendritic polymers with enhanced amplification and interior functionality for use in size calibration) ΙT Medical goods (stents; dendritic polymers with enhanced amplification and interior functionality for use in stones) ΙT Lithography (submicron; dendritic polymers with enhanced amplification and interior functionality for use in nanolithog.) ΙT Chromatography (supports; dendritic polymers with enhanced amplification and interior functionality for use as supports in sepns.) 914111-87-8 ΙT 1057290-29-5 RL: PRPH (Prophetic) (Dendritic polymers with enhanced amplification and interior functionality for use in various applications, such as drug delivery, transfection, and diagnostics) ΙT 7440-57-5, Gold, reactions RL: RCT (Reactant); RACT (Reactant or reagent) (dendrimer core; dendritic polymers with enhanced amplification and interior functionality for use in various applications, such as deemulsifiers, drug delivery, transfection, and diagnostics) ΙT 867178-38-9P, CyTE 807 RL: BSU (Biological study, unclassified); IMF (Industrial manufacture); BIOL (Biological study); PREP (Preparation) (dendritic polymers with enhanced amplification and interior functionality for use in various applications, such as deemulsifiers, drug delivery, transfection, and diagnostics) ΙT 757960-10-4, IR-806 RL: BSU (Biological study, unclassified); RCT (Reactant); BIOL (Biological study); RACT (Reactant or reagent) (dendritic polymers with enhanced amplification and interior functionality for use in various applications, such as deemulsifiers, drug delivery, transfection, and diagnostics) 80529-93-7 ΙT RL: DGN (Diagnostic use); BIOL (Biological study); USES (Uses) (dendritic polymers with enhanced amplification and interior functionality for use in various applications, such as deemulsifiers, drug delivery, transfection, and diagnostics) 893412-07-2P 914111-49-2P 914111-51-6P 914111-53-8P ΙT

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RL: IMF (Industrial manufacture); PREP (Preparation)
        (dendritic polymers with enhanced amplification and
        interior functionality for use in various applications, such as
        deemulsifiers, drug delivery, transfection, and diagnostics)
     120-43-4DP, reaction products with pentaerythritol tetraglycidyl
ΙT
     ether and polyethylenimine
                                  1471-18-7P, Pentaerythritol tetraallyl
             3126-63-4DP, reaction products with polyethylenimine and Et
                             3126-63-4P, Pentaerythritol tetraglycidyl
     piperazinecarboxylate
             9002-98-6DP, reaction products with pentaerythritol
     tetraglycidyl ether and Et piperazinecarboxylate
                                                         13236-00-5P,
     Pentaerythritol triglycidyl ether
                                         25805-17-8DP, hydrolyzed,
     end-capped with dendritic poly(etherhydroxylamine)
                                                           49859-90-7P,
     1-Imidazolidineethanamine
                                 133466-62-3P
                                                148193-00-4P,
     Bis(2-piperazinoethyl) disulfide
                                        723342-61-8P
                                                        893411-65-9P
     893411-66-0P
                    893411-67-1P
                                   893411-68-2P
                                                   893411-69-3P
                    893411-72-8DP, reaction products with PAMAM and
     893411-71-7P
     1-(aminoethyl)piperazine
                                893411-73-9P
                                               893411-74-0P
     893411-75-1P
                    893411-76-2P
                                   893411-77-3P
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                                   914111-82-3P
                                                   914111-83-4P
     914111-84-5P
                    914111-86-7P
                                   914111-87-8DP, reaction products with
                          914301-40-9P
     gold nanoparticles
     RL: IMF (Industrial manufacture); RCT (Reactant); PREP
     (Preparation); RACT (Reactant or reagent)
        (dendritic polymers with enhanced amplification and
        interior functionality for use in various applications, such as
        deemulsifiers, drug delivery, transfection, and diagnostics)
     130920-81-9P
                    893411-77-3DP, reaction products with Et oxazoline
ΙT
                   893411-79-5DP, reaction products with glycidol
     homopolymer
     914111-62-9P
                                   914111-75-4DP, reaction products with
                    914111-68-5P
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dendrimer contq. Et ester surface group and
1-(2-aminoethyl)piperazine
                            914111-76-5P 914111-77-6P
914301-79-4P
              914301-80-7P
RL: IMF (Industrial manufacture); RCT (Reactant); THU (Therapeutic
use); BIOL (Biological study); PREP (Preparation); RACT (Reactant or
reagent); USES (Uses)
   (dendritic polymers with enhanced amplification and
   interior functionality for use in various applications, such as
   deemulsifiers, drug delivery, transfection, and diagnostics)
50-00-0, Formaldehyde, reactions 62-56-6, Thiourea, reactions
75-55-8, 2-Methylaziridine
                            96-33-3, Methyl acrylate
                                                        103-49-1,
Dibenzylamine 106-89-8, Epichlorohydrin, reactions
106-95-6, Allyl bromide, reactions 106-96-7, Propargyl bromide
107-15-3, Ethylene diamine, reactions
                                       107-96-0,
3-Mercaptopropionic acid
                          108-10-1, 4-Methyl-2-pentanone
108-24-7, Acetic anhydride 110-85-0, Piperazine, reactions
111-40-0, Diethylenetriamine
                              111-41-1, (2-Hydroxyethyl)
                 111-42-2, Diethanolamine, reactions
ethylenediamine
                                                        115-77-5,
Pentaerythritol, reactions 124-02-7, Diallyl amine
                                                      124-09-4,
Hexamethylenediamine, reactions 140-31-8,
N-(2-Aminoethyl)piperazine 140-31-80, 1-(2-Aminoethyl)
piperazine, reaction products with dendrimers
                         420-12-2, Ethylene sulfide 534-26-9,
Ethanolamine, reactions
2-Methyl-2-imidazoline
                        628-87-5, Iminodiacetonitrile
                                                         762-42-5,
Dimethylacetylene dicarboxylate 937-14-4, m-Chloroperoxy benzoic
      1471-17-6, Pentaerythritol triallyl ether
                                                  2095-03-6,
Bis(4-glycidyloxyphenyl)methane
                                2451-62-9,
Tris(2,3-Epoxypropyl)isocyanurate 3454-29-3, Trimethylolpropane
triglycidyl ether
                    4097-89-6, Tris(2-aminoethyl)amine
Diethyl iminodiacetate
                        7681-57-4, Sodium meta-Bisulfite
10471-78-0
            10595-60-5
                         14002-32-5, Tris(hydroxymethylamine)(
14283-07-9, Lithium tetrafluoroborate
                                        15625-89-5,
Trimethylolpropane triacrylate
                                17261-34-6
                                              17557-23-2, Neopentyl
glycol diglycidyl ether 26628-22-8, Sodium azide
                                                     28768-32-3
66072-38-6, Triphenylolmethane triglycidylether
                                                  67186-35-0,
Acryloxymethyltrimethylsilane
                                101567-38-8
                                             139611-97-5
566916-00-5
             893412-17-4
                           914111-42-5
                                         914111-45-8
RL: RCT (Reactant); RACT (Reactant or reagent)
   (dendritic polymers with enhanced amplification and
   interior functionality for use in various applications, such as
   deemulsifiers, drug delivery, transfection, and diagnostics)
53-86-1, Indomethacin
                       15663-27-1, Cisplatin
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
   (dendritic polymers with enhanced amplification and
   interior functionality for use in various applications, such as
   deemulsifiers, drug delivery, transfection, and diagnostics)
26937-01-9D, PAMAM, reaction products with dendrimer contg. Et ester
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RL: RCT (Reactant); RACT (Reactant or reagent)
        (dendritic; dendritic polymers with enhanced
        amplification and interior functionality for use in various
        applications, such as deemulsifiers, drug delivery, transfection,
        and diagnostics)
     914111-85-6P
ΙT
     RL: IMF (Industrial manufacture); PREP (Preparation)
        (hyper-branched; dendritic polymers with enhanced
        amplification and interior functionality for use in various
        applications, such as deemulsifiers, drug delivery, transfection,
        and diagnostics)
                     HCA COPYRIGHT 2009 ACS on STN
L276 ANSWER 2 OF 35
     145:83842 HCA
                    Full-text
ΑN
     Dendritic polymers with enhanced amplification and
ΤI
     interior functionality
     Tomalia, Donald A.; Swanson, Douglas R.; Huang, Baohua; Pulgam,
ΙN
     Veera Reddy
     Dendritic Nanotechnologies, Inc., USA
PA
     PCT Int. Appl., 143 pp.
SO
     CODEN: PIXXD2
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     Patent
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surface groups and 1-(aminoethyl)piperazine

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        AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA,
        CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI,
        GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM,
        KN, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, LY, MA, MD, MG,
        MK, MN, MW, MX, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT,
        RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT,
        TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW
    RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU,
        IE, IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR,
        BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD,
        TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM,
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	EP	18771		AM,	AZ,				MD, 0116							EP	, 01		
		R:	AT,	BE,	BG,	СН,	CY,	CZ,	DE,	DK,	EE	Ξ, :	ES,	FI.	FR,	GB	, GI	20051 21 R, HU,	2
			IE,	IS,	IT,		LT,	LU,										SK,	
	BR	20050							0226		BR	20	05-	1228	32			20051	2
	JP	20085	54562	21		T		2008	1218	,	JP	20	08-	5076	544			21	
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	US	20070	2442	296		A1		2007	1018		US	20	06-	5947	776			20060	9
													<					29	
	XM	20060)122	07		A		2007	0213]	MX	20	06-	1220	7			20061	0
													<					20	
	KR	20070)154;	32		A		2007	0202		KR	20	06-	7241	L91			20061	1
													<					17	
		84336		077		B1		2008			T NT	20	0.0	~ NT / (777				
	IN	20060	JN∪4.	211		A		2007	0629		ΙN			CN42	2 / /			20061	1
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	XM	20070)104	02		A		2008	0122]	MX	20	07-	1040)2			20070	8
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Dendritic polymers with surface group no. defined by the equation z = NcNbG [G = no. of concentric branched cell shells surrounding the core, Nb = branched cell multiplicity, Nc (core multiplicity) = 1-1000] and interior functionality 0 or 1-1000 are disclosed. These dendritic polymer are made by use of fast, reactive ring opening

chem. (or other fast reactions) combined with the use of branch cell reagents in a controlled way to rapidly and precisely build dendrimer structures, generation by generation, with precise structures with cleaner chem., typically single products, lower excesses of reagents, lower levels of diln., higher capacity method, more easily scale to com. dimensions, new ranges of materials, and lower cost. dendrimer compn. prepd. have novel internal functionality, greater stability, e.g., thermal stability and less or no reverse Michaels reaction, and which reach encapsulation surface densities at lower generations. These reactions of polyfunctional branch cell reagents with polyfunctional surfaces do not create gelled materials. typical G1 dendrimer was manufd. by reaction of 6.32 g Et Npiperazinecarboxylate 2 h 20 min with 3.6 g pentaerythritol tetraglycidyl ether (I) in MeOH, removal other the carboethoxy groups by KOH at 85-90° in water-MeOH soln., reaction of 1.65 g 2nd intermediate 2 days with 5.05 g I in MeOH, and removal of the carboethoxy groups by KOH at 85-90° in water-MeOH soln.

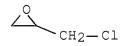
IT 106-89-8, Epichlorohydrin, reactions 107-15-3, Ethylenediamine, reactions 110-85-0, Piperazine, reactions 111-40-0, Diethylenetriamine 140-31-8,

1-(2-Aminoethyl)piperazine

RL: RCT (Reactant); RACT (Reactant or reagent)
(precursor; dendritic polymers with enhanced surface
group content and interior functionality)

RN 106-89-8 HCA

CN Oxirane, 2-(chloromethyl)- (CA INDEX NAME)



RN 107-15-3 HCA CN 1,2-Ethanediamine (CA INDEX NAME)

H2N-CH2-CH2-NH2

RN 110-85-0 HCA CN Piperazine (CA INDEX NAME)

RN 111-40-0 HCA

CN 1,2-Ethanediamine, N1-(2-aminoethyl)- (CA INDEX NAME)

H2N-CH2-CH2-NH-CH2-CH2-NH2

RN 140-31-8 HCA

CN 1-Piperazineethanamine (CA INDEX NAME)

CC 35-7 (Chemistry of Synthetic High Polymers)

ST dendritic polymer surface functionality enhancement; interior functionality enhancement dendritic polymer; ethyl piperazinecarboxylate pentaerythritol tetraglycidyl ether dendrimer manuf

IT Dendritic polymers

RL: IMF (Industrial manufacture); PRP (Properties); PREP (Preparation)

(dendritic polymers with enhanced surface group content and interior functionality)

IT Agriculture and Agricultural chemistry

(dendritic polymers with enhanced surface group content and interior functionality for agricultural formulations)

IT Drugs

(dendritic polymers with enhanced surface group content and interior functionality for pharmaceutical compns.)

IT Polythioethers

RL: IMF (Industrial manufacture); PREP (Preparation) (polyamine-; dendritic polymers with enhanced surface group content and interior functionality)

IT Polyethers, preparation

```
(Preparation)
        (polyamine-; dendritic polymers with enhanced surface
       group content and interior functionality)
ΙT
    Polyamines
    RL: IMF (Industrial manufacture); PRP (Properties); PREP
     (Preparation)
        (polyether-; dendritic polymers with enhanced surface
       group content and interior functionality)
ΙT
    Polyamines
    RL: IMF (Industrial manufacture); PREP (Preparation)
        (polythioether-; dendritic polymers with enhanced
       surface group content and interior functionality)
    893411-68-2P
                   893411-71-7P 893411-73-9P
                                                893411-74-0P
ΙΤ
    893411-75-1P
                   893411-76-2P 893411-84-2P 893411-85-3P
    893411-86-4P 893411-87-5P 893411-89-7P 893411-90-0P
    893411-91-1P 893411-93-3P 893411-94-4P 893411-96-6P
    893411-97-7P 893411-98-8P 893412-00-5P 893412-01-6P
    893412-02-7P 893412-04-9P 893412-05-0P 893412-09-4P
    893412-10-7P 893412-11-8DP, reaction products with mercaptoethanol
    893412-13-0P 893412-14-1P 893412-15-2P 893412-16-3P
    893412-18-5P 893412-19-6P
                                  893412-20-9P
                                                893412-22-1P
    893412-23-2P 894098-23-8P
    RL: IMF (Industrial manufacture); PREP (Preparation)
       (dendritic polymers with enhanced surface group content
       and interior functionality)
    80529-93-7DP, Gd-DTPA, complexes with dendritic polymers
ΙT
    893411-78-4DP, complexes with Gd-DTPA 893411-88-6DP, complexes
    with Gd-DTPA
                   893412-24-3P
    RL: IMF (Industrial manufacture); PRP (Properties); PREP
     (Preparation)
       (dendritic polymers with enhanced surface group content
       and interior functionality)
    893411-67-1P 893411-70-6P
                                  893411-78-4P
                                                893411-79-5P
ΙT
    893411-80-8P
                   893411-81-9P
                                  893411-82-0P
                                                893411-83-1P
    893411-88-6P, Ethyl N-piperazinecarboxylate-pentaerythritol
    tetraglycidyl ether copolymer 893411-92-2P
    893411-95-5P
                   893411-99-9P 893412-03-8P 893412-11-8P
    893412-12-9P
    RL: IMF (Industrial manufacture); RCT (Reactant); PREP
     (Preparation); RACT (Reactant or reagent)
        (dendritic polymers with enhanced surface group content
       and interior functionality)
ΙT
    3126-63-4P, Pentaerythritol tetraglycidyl ether
                                                     130920-81-9P
    893411-65-9P
                   893411-66-0P 893411-69-3P 893411-72-8P
    893411-77-3P
                   893412-06-1P 893412-07-2P 893412-08-3P
    893412-21-0P
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RL: IMF (Industrial manufacture); PRP (Properties); PREP

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RL: IMF (Industrial manufacture); RCT (Reactant); PREP
     (Preparation); RACT (Reactant or reagent)
        (precursor; dendritic polymers with enhanced surface
       group content and interior functionality)
     60-24-2, Mercaptoethanol 75-55-8, 2-Methylaziridine 77-86-1,
ΙΤ
     TRIS 96-33-3, Methyl acrylate 106-89-8, Epichlorohydrin,
     reactions 107-15-3, Ethylenediamine, reactions 108-10-1,
     4-Methyl-2-pentanone 110-85-0, Piperazine, reactions
     110-91-8, Morpholine, reactions 111-40-0,
     Diethylenetriamine 111-42-2, Diethanolamine, reactions 115-77-5,
     Pentaerythritol, reactions 120-43-4, Ethyl N-piperazinecarboxylate
     124-02-7, Diallylamine
                            124-09-4, Hexamethylenediamine, reactions
     140-31-8, 1-(2-Aminoethyl)piperazine 141-43-5,
     Ethanolamine, reactions 617-52-7, Dimethyl itaconate 2095-03-6,
     Bis(4-glycidyloxyphenyl)methane 2451-62-9, Tris(2,3-epoxypropyl)
     isocyanurate 3454-29-3, Trimethylolpropane triglycidyl ether
     5026-74-4, N,N-Diglycidyl-4-glycidyloxyaniline 6290-05-7, Diethyl
     iminodiacetate 10471-78-0, 2-Isopropenyl-2-Oxazoline 15625-89-5,
     Trimethylolpropane triacrylate 28768-32-3,
     4,4'-Methylenebis(N,N-diglycidylaniline) 43224-82-4 60457-62-7
     139611-97-5
                 566916-00-5 893412-17-4
     RL: RCT (Reactant); RACT (Reactant or reagent)
        (precursor; dendritic polymers with enhanced surface
       group content and interior functionality)
L276 ANSWER 3 OF 35 HCA COPYRIGHT 2009 ACS on STN
     143:175508 HCA Full-text
ΑN
     Complexing sorbent, method for the production and use thereof
ΤI
    Polosin, Vladimir Mikhailovich; Krasavin, Igor Alexandrovich;
ΙN
     Orlova, Galina Vladimirovna; Visokova, Nina Nikolaevna; Dolzhnikova,
     Elena Nikolaevna; Ryabokobilko, Yuri Sergeevich; Evdokimova, Natalia
    Nikolaevna; Belyakov, Evgeni Alexandrovich
    Russia
PA
SO
    PCT Int. Appl., 20 pp.
    CODEN: PIXXD2
DT
    Patent
LA
    Russian
FAN.CNT 1
     PATENT NO.
                               DATE APPLICATION NO.
                                                                DATE
                       KIND
    WO 2005068070 A1 20050728 WO 2005-RU12
PI
                                                                 200501
                                                                 17
                                                <--
            AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA,
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CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI,

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GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW

RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

RU 2270056

C2 20060220 RU 2004-100851
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200401 15

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PRAI RU 2004-100851 A 20040115 <--

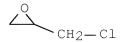
The invention relates to applied chem., in particular to a complexing sorbent contg. an active sorbing layer which is immobilized on a solid carrier embodied as a cellulose or a synthetic polymer and comprises ethylenediamine or diethylenetriamine or triethylenetetramine or tetraethylenepentamine or polyethylenepolyamine or polyethylenepolyamine with copolymers, condensed with complexons, selected from a group contg. carboxylcontg. complexons with fragments -NHCH2COOH, -N(CH2COOH)2, complexons with phosphonic groups arrangement -N(CH2PO3H2)2, hydroxyl-contg. complexons with fragments =NCH2CH2OH, HOCH2CH2-N-CH2COOH, HOCH2CH2-N-CH2PO(OH)2. Methods for producing inventive sorbent and using said sorbent for removing ions of a variety of valencies of different metals and metalloids from aq. media at a large range of pH assocd. with a subsequent regeneration of said sorbent are also disclosed. Monovalent cations, such as sodium, potassium, and lithium, did not sorb well.

17 106-89-8, Epichlorohydrin, reactions 107-15-3, Ethylenediamine, reactions 111-40-0, Diethylenetriamine 112-57-2, Tetraethylenepentamine

RL: RCT (Reactant); RACT (Reactant or reagent)
(complexing sorbent, method for prodn. and use thereof for cation exchange)

RN 106-89-8 HCA

CN Oxirane, 2-(chloromethyl)- (CA INDEX NAME)



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RN
    107-15-3 HCA
CN
    1,2-Ethanediamine (CA INDEX NAME)
H_2N-CH_2-CH_2-NH_2
    111-40-0 HCA
RN
     1,2-Ethanediamine, N1-(2-aminoethyl)- (CA INDEX NAME)
CN
H2N-CH2-CH2-NH-CH2-CH2-NH2
    112-57-2 HCA
RN
CN
    1,2-Ethanediamine, N1-(2-aminoethyl)-N2-[2-[(2-
     aminoethyl)amino]ethyl]- (CA INDEX NAME)
H2N-CH2-CH2-NH-CH2-CH2-NH-CH2-CH2-NH-CH2-CH2-NH-CH2-NH-
ΙT
     7647-01-0, Hydrochloric acid, reactions
     RL: ARG (Analytical reagent use); RCT (Reactant); ANST (Analytical
     study); RACT (Reactant or reagent); USES (Uses)
        (for regeneration; complexing sorbent, method for prodn. and use
        thereof for cation exchange)
RN
     7647-01-0 HCA
    Hydrochloric acid (CA INDEX NAME)
CN
HC1
IC
    ICM B01J020-26
     ICS B01J020-24; B01J020-32; C02F001-28
     48-1 (Unit Operations and Processes)
CC
     Section cross-reference(s): 35, 38, 79
     complexation sorbent immobilized active layer cation exchange
ST
     cellulose resin
    Polymers, uses
ΙT
    RL: TEM (Technical or engineered material use); USES (Uses)
        (carrier; complexing sorbent, method for prodn. and use thereof
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for cation exchange)
ΙT
    Phenolic resins, reactions
    RL: RCT (Reactant); RACT (Reactant or reagent)
        (complexing sorbent, method for prodn. and use thereof for cation
        exchange)
    Acids, reactions
ΙT
    RL: ARG (Analytical reagent use); RCT (Reactant); ANST (Analytical
     study); RACT (Reactant or reagent); USES (Uses)
        (for metal ion elution and resin regeneration;
        complexing sorbent, method for prodn. and use thereof for cation
        exchange)
ΙT
    Polyamines
    RL: SPN (Synthetic preparation); TEM (Technical or engineered
    material use); PREP (Preparation); USES (Uses)
        (polyethylene-, reaction products, reaction products with
        styrene-divinyl benzene- based copolymers; complexing
        sorbent, method for prodn. and use thereof for cation exchange)
    Phenolic resins, uses
ΙT
    RL: SPN (Synthetic preparation); TEM (Technical or engineered
    material use); PREP (Preparation); USES (Uses)
        (sulfo-contq., reaction products with propylene-ethyleneimine
        copolymers, complexes with Phosphonomethylglycine;
        complexing sorbent, method for prodn. and use thereof for cation
        exchange)
ΙΤ
    9003-70-7DP, Styrene-divinyl benzene copolymer,
     sulfonated, chlorided, hydroxymethylated, or chloromethylated,
    reaction products with polyethylenepolyamines and combinations of
    amino-contg. carboxylic and phosphonic acids
    RL: SPN (Synthetic preparation); TEM (Technical or engineered
    material use); PREP (Preparation); USES (Uses)
        (complexing sorbent)
ΙT
    60-00-4, Ethylenediaminetetraacetic acid, reactions
                                                          67-43-6,
    Diethylenetriamine-N, N, N', N'', N''-pentaacetic acid 106-89-8
     , Epichlorohydrin, reactions 107-15-3, Ethylenediamine,
    reactions 111-40-0, Diethylenetriamine 112-57-2,
    Tetraethylenepentamine
                              139-13-9, Nitrilotriacetic acid
    1071-83-6, Phosphonomethylglycine 1310-73-2, Sodium hydroxide,
                 2809-21-4, (1-Hydroxyethylidene)diphosphonic acid
    reactions
    5835-28-9, N-(2-Hydroxyethyl) glycine
                                            5994-61-6,
                                             9003-35-4D,
    N-(Phosphonomethyl)iminodiacetic acid
    Phenol-formaldehyde copolymer, sulfonated
                                                 9003-70-7D,
    Styrene-divinyl benzene copolymer, sulfonated, chlorided,
    hydroxymethylated, or chloromethylated
                                              17261-34-6,
     Iminodimethylenephosphonic acid
                                       53825-97-1,
    N-(2-Hydroxyethyl)diethylenetriamine-N,N',N'',N''-tetraacetic acid
     861001-94-7
    RL: RCT (Reactant); RACT (Reactant or reagent)
```

(complexing sorbent, method for prodn. and use thereof for cation exchange)

139-13-9DP, Nitrilotriacetic acid, complexes with sulfochlorinated ΙT styrene-divinyl benzene-aziridine graft copolymer 1071-83-6DP, Phosphonomethylglycine, complexes with phenol-formaldehyde- propylene-aziridine graft copolymer 2809-21-4DP, (1-Hydroxyethylidene)diphosphonic acid, reaction products with cellulose- polyaziridine- epichlorohydrin 5994-61-6DP, N-(Phosphonomethyl)iminodiacetic acid, complexes with sulfonated styrene-divinyl benzene-triethylenetetraamine graft copolymer 9004-34-6DP, Cellulose, reaction products with 17261-34-6DP, Iminodimethylenephosphonic acid, reaction products with epichlorohydrin-cellulose-diethylenetriamine copolymer 53825-97-1DP, N-(2-Hydroxyethyl)diethylenetriamine-N, N', N'', N''tetraacetic acid, complexes with hydroxymethylated styrene-divinyl benzene-triethylenetetraamine graft copolymer 183428-29-7DP, chloromethylated, complexes with N-(2-Hydroxyethyl)glycine, and sulfochlorinated, complexes with nitrilotriacetic acid 861001-88-9P 861001-89-0DP, reaction 861001-90-3P products with (1-Hydroxyethylidene)diphosphonic acid 861001-92-5P 861001-93-6DP, reaction products with iminodimethylenephosphonic acid 861001-94-7DP, reaction products with sulfonated- chlorided styrene-divinyl benzene copolymer 861001-95-8DP, hydroxymethylated, complexes with N-(2-hydroxyethyl)diethylenetriamine- N, N', N'', N''-tetraacetic acid and sulfonated, complexes with N-(Phosphonomethyl)iminodiacetic acid 861001-96-9DP, complexes with Phosphonomethylglycine RL: SPN (Synthetic preparation); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses) (complexing sorbent, method for prodn. and use thereof for cation exchange) ΙΤ 7647-01-0, Hydrochloric acid, reactions

7697-37-2, Nitric acid, reactions

RL: ARG (Analytical reagent use); RCT (Reactant); ANST (Analytical study); RACT (Reactant or reagent); USES (Uses)

(for regeneration; complexing sorbent, method for prodn. and use thereof for cation exchange)

5835-28-9DP, N-(2-Hydroxyethyl)aminoacetic acid, complexes with ΙT chloromethylated styrene-divinyl benzene- aziridine graft copolymer and other N- derivs. and complexes

RL: SPN (Synthetic preparation); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)

(immobilized on carrier; complexing sorbent, method for prodn. and use thereof for cation exchange)

THERE ARE 9 CITED REFERENCES AVAILABLE FOR THIS RECORD RE.CNT ALL CITATIONS AVAILABLE IN THE RE FORMAT

- L276 ANSWER 4 OF 35 HCA COPYRIGHT 2009 ACS on STN
- AN 143:59847 HCA
- TI Preparation of novel quinoline derivatives for treating hyperproliferative disorders
- L276 ANSWER 5 OF 35 HCA COPYRIGHT 2009 ACS on STN
- AN 142:316854 HCA
- TI Preparation of substituted fused pyrimidine-4(3H)-one compounds with affinity for liver X receptors
- L276 ANSWER 6 OF 35 HCA COPYRIGHT 2009 ACS on STN
- AN 142:297989 HCA
- TI Preparation of substituted indoles as inhibitors of poly(ADP-ribose)
 polymerase (PARP)
- L276 ANSWER 7 OF 35 HCA COPYRIGHT 2009 ACS on STN
- AN 142:219283 HCA
- TI Preparation of 1H-imidazo[4,5-c]pyridin-2-yl derivatives as inhibitors of Akt activity
- L276 ANSWER 8 OF 35 HCA COPYRIGHT 2009 ACS on STN
- AN 142:204494 HCA Full-text
- TI Preparation of a new adsorbent for removal of low density lipoprotein
- AU Fu, Guo-Qi; Chen, Xin-Fu; Yuan, Zhi; Liu, Bin; Shen, Bin; He, Bing-Lin
- CS State Key Lab. Functional Polymer Mater. Adsorption and Separation, Inst. Polymer Chem., Nankai Univ., Tianjin, 300071, Peop. Rep. China
- SO Gaodeng Xuexiao Huaxue Xuebao (2004), 25(6), 1183-1185 CODEN: KTHPDM; ISSN: 0251-0790
- PB Gaodeng Jiaoyu Chubanshe
- DT Journal
- LA Chinese
- On the basis of low d. lipoprotein (LDL) adsorption on matrix-bound tryptophan, a new LDL adsorbent was prepd. with indole-3-acetic acid (IAA) as a ligand, which had indole group in its chem. structure just as tryptophan. Macroporous polyvinyl alc. (PVA) beads were obtained by suspension copolymm. of vinyl acetate and triallyl isocyanurate in the presence of porogen, followed by subsequent alcoholysis step. The PVA beads were allowed to react with epichlorohydrin, and the thus obtained epoxidized beads were then reacted with several polyamines to introduce space arms with different lengths. IAA was then coupled to the spacer-attaching beads by using DCC/HOBt method employed commonly in polypeptide synthesis. The primary in vitro adsorption tests showed that the obtained adsorbents provided a good binding capacity for LDL, and had much larger absorbing capacity than

the adsorbent prepd. by direct immobilization of tryptophan on the epoxy-activated PVA beads. This proves that indole groups do play an important part in binding LDL.

IT 106-89-8, Epichlorohydrin, reactions 107-15-3,

1,2-Ethanediamine, reactions 111-40-0 112-24-3

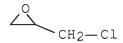
112-57-2

RL: RCT (Reactant); RACT (Reactant or reagent)

(prepn. of adsorbents contg. PVA and amines and indole acetic acid for removal of low d. lipoprotein)

RN 106-89-8 HCA

CN Oxirane, 2-(chloromethyl)- (CA INDEX NAME)



RN 107-15-3 HCA

CN 1,2-Ethanediamine (CA INDEX NAME)

$$H_2N-CH_2-CH_2-NH_2$$

RN 111-40-0 HCA

CN 1,2-Ethanediamine, N1-(2-aminoethyl)- (CA INDEX NAME)

RN 112-24-3 HCA

CN 1,2-Ethanediamine, N1,N2-bis(2-aminoethyl)- (CA INDEX NAME)

RN 112-57-2 HCA

CN 1,2-Ethanediamine, N1-(2-aminoethyl)-N2-[2-[(2-aminoethyl)amino]ethyl]- (CA INDEX NAME)

```
CC
    63-8 (Pharmaceuticals)
     Section cross-reference(s): 25, 35
    73-22-3, Tryptophan, reactions 87-51-4, Indole-3-acetic acid,
ΙΤ
     reactions 106-89-8, Epichlorohydrin, reactions
     107-15-3, 1,2-Ethanediamine, reactions 111-40-0
     112-24-3 112-57-2
                        124-09-4, 1,6-Hexanediamine,
     reactions
                538-75-0, DCC
     RL: RCT (Reactant); RACT (Reactant or reagent)
        (prepn. of adsorbents contq. PVA and amines and indole acetic
        acid for removal of low d. lipoprotein)
L276 ANSWER 9 OF 35 HCA COPYRIGHT 2009 ACS on STN
ΑN
    141:314320 HCA
    Preparation of indazoles and related compounds as p38 inhibitors
ΤI
L276 ANSWER 10 OF 35 HCA COPYRIGHT 2009 ACS on STN
AN
     141:190781 HCA
    Preparation of pyrrolopyridinones as mitogen activated protein
ΤI
     kinase-activated protein kinase-2 inhibiting compounds
L276 ANSWER 11 OF 35 HCA COPYRIGHT 2009 ACS on STN
AN
    141:71568 HCA Full-text
    Preparation of supported triazine compounds and their use in forming
ΤI
     multidimensional libraries for affinity chromatography
IN
    Burton, Steven James; Hussain, Abid; Pearson, James Christopher
    Prometic Biosciences Ltd., UK
PA
    PCT Int. Appl., 40 pp.
SO
    CODEN: PIXXD2
DT
    Patent
LA
    English
FAN.CNT 1
                                      APPLICATION NO.
     PATENT NO.
                       KIND DATE
                                                                 DATE
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PΙ
    WO 2004052870 A1 20040624 WO 2003-GB5368
                                                                  200312
                                                                  09
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            AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA,
            CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI,
            GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP,
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KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW,

			SG,	SK,		SY,	ТJ,	OM, TM,									
		R₩:	BW, AZ, DK, SE,	GH, BY, EE, SI,	GM, KG, ES,	KE, KZ, FI, TR,	LS, MD, FR, BF,	MW, RU, GB, BJ,	TJ, GR,	TM, HU,	AT, IE,	BE, IT,	BG, LU,	CH, MC,	CY, NL,	CZ, PT,	DE, RO,
	CA	2508		INE ,				2004	0624	(CA 2	003-	2508	452		2 0 :	00312
	AU	2003	2884	47		A1		2004	0630	i	AU 2		2884	47		2:0:	00312 9
		2003: 1569:		47		B2 A1		2008) 2005)]	EP 2	< 003-	7803	66		2 0	00312 9
		R:	PT,					ES, FI,									
	CN	1788	SK 003			A		2006	0614	(CN 2	003-	8010	5520		2:0:	00312 9
	JP	2006	5197	64		T		2006	0831	,	JP 2	< 005-	5023.	37		2:0:	00312 9
	ΝZ	5410	88			A		2009)531	I	NZ 2	< 003-	5410	88		2:	00312
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	US	2006	0052	5 9 8		Α1		2006	0309	1	US 2	< 005-	5369	53			00508
PRAI	US	2002- 2003- 2003-	-443	0 9 2P		A P W		2002: 2003: 2003:	0128	<	_	<					

Supported triazine multidimensional combinatorial libraries I (each Z = independently Q, Y; each X = independently multivalent aminyl group, diaminyl-terminated spacer; each Y = independently aminyl group; M = support matrix) were prepd. ligands for the purifn. of natural, recombinant, or transgenic proteinaceaus materials. Thus, a combinatorial library contg. linked triazines II (M = epichlorohydrin-derivatized agarose resin) was prepd. in several steps by condensing the appropriate diamines with cyanuric chloride, followed by further derivatization with diamines, amino alcs., or amino acids.

IT 100-46-9, Benzylamine, reactions 106-89-8, Epichlorohydrin, reactions 107-15-3, Ethylenediamine, reactions

RL: CRT (Combinatorial reactant); RCT (Reactant); CMBI (Combinatorial study); RACT (Reactant or reagent)

(prepn. of supported multidimensional triazine combinatorial libraries for affinity chromatog. purifn. of proteinaceous materials)

RN 100-46-9 HCA

 H_2N-CH_2-Ph

RN 106-89-8 HCA CN Oxirane, 2-(chloromethyl)- (CA INDEX NAME)

CH₂-Cl

RN 107-15-3 HCA

CN 1,2-Ethanediamine (CA INDEX NAME)

 $H_2N-CH_2-CH_2-NH_2$

IC ICM C07D251-54 ICS C07D251-70; C07D403-14; B01D015-08; G01N030-48

- CC 28-19 (Heterocyclic Compounds (More Than One Hetero Atom))
 Section cross-reference(s): 9
- TT 711012-18-9DP, reaction products with epichlorohydrin-derivatized agarose resin 711012-20-3DP, reaction products with epichlorohydrin-derivatized agarose resin 711012-21-4DP, reaction products with epichlorohydrin-derivatized agarose resin

RL: CPN (Combinatorial preparation); PUR (Purification or recovery); CMBI (Combinatorial study); PREP (Preparation)

(prepn. of supported multidimensional triazine combinatorial libraries for affinity chromatog. purifn. of proteinaceous materials)

51-67-2, Tyramine 56-12-2, 4-Aminobutyric acid, reactions 56-86-0, L-Glutamic acid, reactions 60-18-4, L-Tyrosine, reactions 60-32-2, 6-Aminocaproic acid 61-54-1, Tryptamine 62-53-3, Aniline, reactions 64-04-0, Phenethylamine 78-81-9, Isobutylamine 89-93-0, 2-Methylbenzylamine 95-55-6, 2-Aminophenol 99-05-8, 3-Aminobenzoic acid 100-46-9, Benzylamine, reactions 104-84-7, 4-Methylbenzylamine 106-89-8, Epichlorohydrin, reactions 107-15-3,

```
Ethylenediamine, reactions 107-95-9, \beta-Alanine 108-44-1,
    m-Toluidine, reactions 108-77-0, Cyanuric chloride 109-73-9,
    Butylamine, reactions 123-30-8, 4-Aminophenol
                                                    150-13-0,
     4-Aminobenzoic acid 516-06-3, Valine 543-82-8,
    2-Amino-6-methylheptane 822-98-0, 2-Aminonorbornane 1877-77-6,
    3-Aminobenzyl alcohol 2038-03-1, 4-(2-Aminoethyl)morpholine
    2706-56-1, 2-(2-Aminoethyl)pyridine 2834-90-4, 4-Amino-1-naphthol
    2835-99-6, 4-Amino-m-cresol 2836-04-6,
    N, N-Dimethyl-1, 3-phenylenediamine 2906-12-9,
    3-Isopropoxypropylamine 3261-62-9, 2-(p-Tolyl)ethylamine
     4403-70-7, 3-Aminobenzylamine 4747-21-1, N-Methylisopropylamine
     7144-05-0, 4-(Aminomethyl)piperidine 7154-73-6,
    1-(2-Aminoethyl)pyrrolidine 7324-05-2, L-Alanineamide
    10420-89-0, (S)-1-(1-Naphthyl)ethylamine 13952-84-6,
     (±)-sec-Butylamine 22374-89-6, 3-Amino-1-phenylbutane
     22526-46-1, (S) -3-Methyl-2-butylamine 23356-96-9, (S)-Prolinol
    23357-52-0, (S)-1,2,3,4-Tetrahydro-1-naphthylamine 27578-60-5,
    1-(2-Aminoethyl)piperidine
                                28292-43-5, 2-Amino-5-methylhexane
    34698-41-4
                 36489-03-9, 2-Ethylthio(ethylamine) 50541-93-0,
     4-Amino-1-benzylpiperidine 51387-90-7,
    2-(2-Aminoethyl)-1-methylpyrrolidine 627086-11-7, PuraBead 6XL
     711012-19-0
    RL: CRT (Combinatorial reactant); RCT (Reactant); CMBI
     (Combinatorial study); RACT (Reactant or reagent)
        (prepn. of supported multidimensional triazine combinatorial
        libraries for affinity chromatog. purifn. of proteinaceous
       materials)
RE.CNT
       10
             THERE ARE 10 CITED REFERENCES AVAILABLE FOR THIS RECORD
             ALL CITATIONS AVAILABLE IN THE RE FORMAT
L276 ANSWER 12 OF 35 HCA COPYRIGHT 2009 ACS on STN
    140:147237 HCA Full-text
    Method for producing selective separation membrane excellent in
    anti-fouling stability
    Koo, Ja-yeong; Kim, Sun-sik; Yoon, Seong-ro; Hong, Son-pyo
    Saehan Industries, Inc., S. Korea
    Jpn. Kokai Tokkyo Koho, 17 pp.
    CODEN: JKXXAF
    Patent
    Japanese
FAN.CNT 3
                              DATE APPLICATION NO.
    PATENT NO.
                  KIND
                                                                DATE
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PI JP 2004025102 A 20040129 JP 2002-187857

AN

ΤI

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	JP	3860510	В2	20061220		
	GB	2390042	A	20031231	GB 2002-14603	
						200206
						25
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	GB	2390042	В	20061115		
	FR	2843045	A1	20040206	FR 2002-9654	
						200207
						30
					<	
	FR	2843045	B1	20080725		
PRAI	DE	2002-10228148	A	20020624	<	
	GΒ	2002-14603	T	20020625	<	
	JP	2002-187857	A	20020627	<	
	NL	2002-1020950	A	20020627	<	
	FR	2002-9654	A	20020730	<	

AB A method is provided for producing selective sepn. membrane (polyamide reverse-osmosis composite membrane) excellent in fouling stability. The method comprises forming a polyamide thin film on a porous support body, and afterwards, performing a hydrophilic coating on the polyamide thin film to produce a hydrophilic polyamide reverse-osmosis composite membrane. The hydrophilic coating is characterized in that an epoxy compd. possessing at least more than two epoxy groups is coated on the polyamide composite membrane, and afterwards, the epoxy compd. is cross-linked to yield a water-insol. polymer.

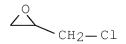
106-89-8D, Epichlorohydrin, reaction products with 1,3,5-tris(2-hydroxyethyl)cyanuric acid, tris(hydroxymethyl)aminomethane, polyvinylalc., polyacrylamide, cellulose, hydroxyethylcellulose, hydroxypropylcellulose, cellulose substituent 110-85-0, Piperazine, reactions 111-40-0, Diethylenetriamine 112-24-3,

Triethylenetetramine

RL: RCT (Reactant); RACT (Reactant or reagent)
(method for producing selective sepn. membrane excellent in anti-fouling stability)

RN 106-89-8 HCA

CN Oxirane, 2-(chloromethyl)- (CA INDEX NAME)



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110-85-0 HCA
RN
CN
    Piperazine (CA INDEX NAME)
      ΝН
RN
     111-40-0 HCA
     1,2-Ethanediamine, N1-(2-aminoethyl)- (CA INDEX NAME)
CN
H2N-CH2-CH2-NH-CH2-CH2-NH2
     112-24-3 HCA
RN
     1,2-Ethanediamine, N1,N2-bis(2-aminoethyl)- (CA INDEX NAME)
CN
H2N-CH2-CH2-NH-CH2-CH2-NH-CH2-CH2-NH2
IC
     ICM B01D069-12
     ICS B01D061-02; B01D061-14; B01D071-26; B01D071-30; B01D071-42;
         B01D071-46; B01D071-56; B01D071-64; B01D071-68; C08J009-36;
          C08L077-00
CC
     38-3 (Plastics Fabrication and Uses)
     Section cross-reference(s): 48, 61
ΙT
    Polymers, uses
     RL: NUU (Other use, unclassified); SPN (Synthetic preparation); PREP
     (Preparation); USES (Uses)
        (halo; method for producing selective sepn. membrane excellent in
        anti-fouling stability)
     Phenolic resins, reactions
ΙT
     RL: RCT (Reactant); RACT (Reactant or reagent)
        (novolak, epoxycresol; method for producing selective sepn.
        membrane excellent in anti-fouling stability)
    Phenolic resins, reactions
ΙT
     RL: RCT (Reactant); RACT (Reactant or reagent)
        (novolak; method for producing selective sepn. membrane excellent
        in anti-fouling stability)
    Polymerization
ΙT
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(surface; method for producing selective sepn. membrane excellent

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in anti-fouling stability)
ΙT
    Polymers, uses
    RL: NUU (Other use, unclassified); SPN (Synthetic preparation); PREP
     (Preparation); USES (Uses)
        (water-insol.; method for producing selective sepn. membrane
       excellent in anti-fouling stability)
    50-70-4, Sorbitol, reactions 50-99-7, Glucose, reactions
ΙT
    56-81-5, Glycerol, reactions 57-48-7, Fructose, reactions
    57-55-6, Propyleneglycol, reactions 69-79-4, Maltose
    1,1,1-Tris(hydroxymethyl)ethane 77-99-6, Trimethylolpropane
    80-05-7, Bisphenol A, reactions 80-05-7D, Bisphenol A,
                          80-08-0, Bis(4-aminophenyl)sulfone
    hydrogenated deriv.
    1,1,3,3-Tetramethylguanidine 87-69-4, Tartaric acid, reactions
    88-45-9, 2,5-Diaminobenzenesulfonic acid
                                              94-96-2,
    2-Ethyl-1,3-hexanediol
                             99-10-5, 3,5-Dihydroxybenzoic acid
    101-77-9, Methylenedianiline 101-90-6, Resorcinoldiglycidylether
    106-58-1, 1,4-Dimethylpiperazine 106-89-80,
    Epichlorohydrin, reaction products with
    1,3,5-tris(2-hydroxyethyl)cyanuric acid,
    tris(hydroxymethyl)aminomethane, polyvinylalc., polyacrylamide,
    cellulose, hydroxyethylcellulose, hydroxypropylcellulose, cellulose
    substituent
                  107-21-1, Ethyleneglycol, reactions
                                                        107-35-7,
                                 107-88-0, 1,3-Butanediol
    2-Aminoethanesulfonic acid
    1,3-Benzenediamine, reactions
                                   108-46-3, Resorcinol, reactions
    108-73-6, Phloroglucinol 108-80-5, Isocyanuric acid
    110-85-0, Piperazine, reactions
                                     111-29-5, 1,5-Pentanediol
    111-40-0, Diethylenetriamine 112-24-3,
    Triethylenetetramine
                         112-47-0, 1,10-Decanediol 115-77-5,
    Pentaerythritol, reactions
                                123-31-9, Hydroquinone, reactions
    126-11-4, Tris(hydroxymethyl)nitromethane
                                               126-30-7,
    Neopentylglycol 280-57-9, 1,4-Diazabicyclo(2.2.2)octane
    504-63-2, 1,3-Propanediol 526-95-4, Gluconic acid 535-87-5,
    3,5-Diaminobenzoic acid 625-69-4, 2,4-Pentanediol 629-11-8,
    1,6-Hexanediol
                     629-30-1, 1,7-Heptanediol
                                                 629-41-4,
                     928-40-5, 1,5-Hexanediol
    1,8-Octanediol
                                                929-59-9,
    2,2'-(Ethylenedioxy)bis(ethylamine) 1117-86-8, 1,2-Octanediol
    1119-86-4, 1,2-Decanediol 1119-87-5, 1,2-Dodecanediol 1477-55-0,
    1,3-Benzenedimethanamine 1675-54-3, Bisphenol A diglycidylether
    1675-54-3D, Bisphenol A diglycidylether, hydrogenated deriv.
    2224-15-9, Ethyleneglycoldiglycidylether
                                              2425-01-6,
    Hydroquinonediqlycidylether
                                 2425-79-8,
    1,4-Butanedioldiglycidylether
                                    2451-62-9,
    Tris(2,3-epoxypropyl)isocyanurate 2579-20-6,
    1,3-Cyclohexane-bis(methylamine) 2935-44-6, 2,5-Hexanediol
    3001-72-7, 1,5-Diazabicyclo(4.3.0)non-5-ene
                                                 3030-47-5 3126-63-4,
    Pentaerythritoltetraglycidylether
                                       3296-90-0,
    Dibromoneopentylglycol 3332-48-7, 1,3-Butanedioldiglycidylether
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3416-24-8, Glucosamine 3454-29-3,
Trimethylolpropanetriglycidylether 3458-28-4, Mannose
3937-56-2, 1,9-Nonanediol 4097-89-6, Tris(aminoethyl)amine
4223-14-7 4741-99-5, N, N'-Bis(2-aminoethyl)-1, 3-propanediamine
5026-74-4, N,N-Diglycidyl-4-glycidyloxyaniline 5343-92-0,
1,2-Pentanediol 5675-51-4, 1,12-Dodecanediol
                                              6674-22-2,
1,8-Diazabicyclo(5.4.0)undec-7-ene
                                   6920-22-5, 1,2-Hexanediol
           7517-06-8, 1,5-Pentanedioldiglycidylether
7365-44-8
9003-47-8, Polyvinylpyridine
                              9004-57-3, Ethylcellulose
9004-67-5, Methylcellulose
                          9012-76-4, Chitosan
                                                 13236-00-5,
Pentaerythritoltriglycidylether
                                 13236-02-7,
Glyceroltriglycidylether
                          14307-02-9, Mannosamine 15763-57-2
16096-31-4, 1,6-Hexanedioldiglycidylether 17342-30-2 17557-23-2,
Neopentylglycoldiglycidylether 18425-64-4,
Trimethylolpropanediglycidylether
                                   21799-87-1
                                               24610-19-3,
1,8-Octanedioldiglycidylether 25322-68-3, Polyethyleneglycol
25322-69-4, Polypropyleneglycol 26142-30-3,
Polypropyleneglycoldiglycidylether
                                    26403-72-5,
Polyethyleneglycoldiglycidylether
                                   28768-32-3,
4,4'-Methylenebis(N,N-diglycidylaniline)
                                          29256-90-4,
                    29915-38-6
Diaminocyclohexane
                                 29953-15-9,
Dibromoneopentylglycoldiglycidylether 30350-48-2, Triaminobenzene
30551-89-4, Poly(allylamine) 33908-71-3, Sorbitol diglycidyl ether
36366-26-4 37237-76-6 40762-73-0, Pentaerythritoldiglycidylether
41678-38-0
            60553-09-5, 1,10-Decanedioldiglycidylether
64055-71-6, Sorbitoltetraglycidylether
                                        64102-85-8,
Diglyceroltriglycidylether 68189-43-5
                                        68399-78-0
                                                     68399-81-5
72557-93-8 74911-53-8
                       77738-93-3 80046-01-1 87257-06-5
101417-05-4
             118549-88-5, Polyglycerolglycidylether 121830-73-7
125457-87-6
             164463-52-9
                           373609-57-5,
1,7-Heptanedioldiglycidylether 373609-58-6,
1,9-Nonanedioldiglycidylether
                               638128-08-2
                                            638128-11-7
638128-12-8
             638128-13-9 638128-14-0 639007-14-0 652149-93-4
RL: RCT (Reactant); RACT (Reactant or reagent)
   (method for producing selective sepn. membrane excellent in
   anti-fouling stability)
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- L276 ANSWER 13 OF 35 HCA COPYRIGHT 2009 ACS on STN
- AN 138:304277 HCA
- TI Preparation of 3-phenyl-4,5,6,7-tetrahydropyrazolo[4,3-c]pyridines as cathepsin S inhibitors for treating allergies
- L276 ANSWER 14 OF 35 HCA COPYRIGHT 2009 ACS on STN
- AN 136:247576 HCA
- TI Preparation of 3-phenyl-4,5,6,7-tetrahydropyrazolo[4,3-c]pyridines as cathepsin S inhibitors for treating allergies

L276 ANSWER 15 OF 35 HCA COPYRIGHT 2009 ACS on STN

AN 136:71178 HCA Full-text

TI Preparation of bactericidal and adsorptive cotton fibers

AU Wang, Ge-Hui; Song, Zhan-Qian

CS Department of Environmental Science and Engineering, State Key Laboratory of Pollution Control and Resources Reuse, Nanjing University, Nanijing, 210093, Peop. Rep. China

SO Yingyong Huaxue (2001), 18(10), 831-833 CODEN: YIHUED; ISSN: 1000-0518

PB Yingyong Huaxue Bianji Weiyuanhui

DT Journal

LA Chinese

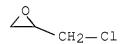
AB Two kinds of bactericidal and adsorptive cotton fibers (BACF-1, BACF-2) were made through epoxidn., amination and quaternization. The test of their bactericidal activity and adsorption capacity tests showed that both functionalized cotton fibers have good adsorption capacity to Cu2+ and antibacterial action to staphylococcus aureus and bacilluscoli. They can be regenerated for repeated use after acidification with dil. hydrochloric acid and washing and sterilization with water and 95% alc. successively.

IT 106-89-8, Epichlorohydrin, reactions
RL: RCT (Reactant); RGT (Reagent); RACT (Reactant or reagent)

(cotton fiber treated with; prepn. of bactericidal and adsorptive cotton fibers)

RN 106-89-8 HCA

CN Oxirane, 2-(chloromethyl)- (CA INDEX NAME)



RN 107-15-3 HCA

CN 1,2-Ethanediamine (CA INDEX NAME)

```
112-57-2 HCA
RN
CN
    1,2-Ethanediamine, N1-(2-aminoethyl)-N2-[2-[(2-aminoethyl)]
     aminoethyl)amino]ethyl]- (CA INDEX NAME)
H2N-CH2-CH2-NH-CH2-CH2-NH-CH2-CH2-NH-CH2-CH2-NH-CH2-CH2-NH2
CC
    40-2 (Textiles and Fibers)
ΙT
     106-89-8, Epichlorohydrin, reactions
     RL: RCT (Reactant); RGT (Reagent); RACT (Reactant or
     reagent)
        (cotton fiber treated with; prepn. of
        bactericidal and adsorptive cotton fibers)
     107-15-3, Ethylenediamine, reactions 112-57-2
ΙΤ
     RL: RGT (Reagent); RACT (Reactant or reagent)
        (cotton fiber treated with; prepn. of
        bactericidal and adsorptive cotton fibers)
ΙT
     13078-59-6P
    RL: RGT (Reagent); SPN (Synthetic preparation); PREP (Preparation);
     RACT (Reactant or reagent)
        (cotton fiber treated with; prepn. of epoxy
        amine for prepn. of bactericidal and adsorptive cotton fibers)
L276 ANSWER 16 OF 35 HCA COPYRIGHT 2009 ACS on STN
ΑN
    135:226873 HCA
ΤI
    Preparation and formulation of azetidines for pharmaceutical use
L276 ANSWER 17 OF 35 HCA COPYRIGHT 2009 ACS on STN
AN
     135:34449 HCA Full-text
ΤI
    Polyamine-based resin and paper coating composition from
    the resin
IN
    Yamamoto, Satoshi; Kawamura, Akira; Tanikawa, Akira
PA
    Sumitomo Chemical Co., Ltd., Japan
    Jpn. Kokai Tokkyo Koho, 10 pp.
SO
    CODEN: JKXXAF
DT
    Patent
LA
    Japanese
FAN.CNT 1
    PATENT NO.
                        KIND DATE
                                          APPLICATION NO.
                                                                 DATE
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    JP 2001164495
                      A 20010619 JP 1999-348886
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                                                                   199912
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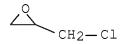
JP 4129853 B2 20080806 PRAI JP 1999-348886 19991208 <--

The resin is prepd. by the reaction of a polyamine of alkylenediamine, polyalkylene polyamine, and/or a heterocyclic polymine contg. ≥ 2 primary or sec. amine group; urea; a nonarom. sec. monoamine; and a crosslinkable compd. of aldehyde, epichlorohydrin, α, ω -dihalo- β -hydrin, polyepoxy, and/or polyisocyanate. Thus, a resin was prepd. by the reaction of diethylenetriamine 0.8, urea 2.4, dibutylamine 0.08, HCHO 0.8 mol in H2O.

IT 106-89-8, Epichlorohydrin, reactions
RL: RCT (Reactant); RACT (Reactant or reagent)
(crosslinking agents; polyamine-based resin and paper coating compn. from the resin)

RN 106-89-8 HCA

CN Oxirane, 2-(chloromethyl)- (CA INDEX NAME)



IT 107-15-3, Ethylenediamine, reactions 111-40-0, Diethylenetriamine

RL: RCT (Reactant); RACT (Reactant or reagent)
(polyamine-based resin and paper coating compn. from the resin)

RN 107-15-3 HCA

CN 1,2-Ethanediamine (CA INDEX NAME)

H2N-CH2-CH2-NH2

RN 111-40-0 HCA

CN 1,2-Ethanediamine, N1-(2-aminoethyl)- (CA INDEX NAME)

H2N-CH2-CH2-NH-CH2-CH2-NH2

IC ICM D21H019-44 ICS C08G073-00; C09D179-04

CC 42-10 (Coatings, Inks, and Related Products)

```
Section cross-reference(s): 43
    polyamide resin binder paper coating; urea formaldehyde
ST
     amine copolymer coating
ΙΤ
    Aldehydes, reactions
     Epoxy resins, reactions
     RL: RCT (Reactant); RACT (Reactant or reagent)
        (crosslinking agents; polyamine-based resim and paper
        coating compn. from the resin)
ΙT
     Crosslinking agents
     Paper
        (polyamine-based resin and paper coating compn. from
        the resin)
    Polyamines
ΙT
     RL: SPN (Synthetic preparation); TEM (Technical or engineered
     material use); PREP (Preparation); USES (Uses)
        (polyamine-based resin and paper coating compn. from
        the resin)
    Coating materials
ΙT
        (water-thinned; polyamine-based resin and paper coating
        compn. from the resin)
     75-13-8D, Isocyanic acid, deriv. 106-89-8,
ΙT
     Epichlorohydrin, reactions
     RL: RCT (Reactant); RACT (Reactant or reagent)
        (crosslinking agents; polyamine-based resin and paper
        coating compn. from the resin)
     50-00-0, Formaldehyde, reactions 57-13-6, Urea, reactions
ΙT
     107-15-3, Ethylenediamine, reactions 111-40-0,
     Diethylenetriamine 111-92-2, Dibutylamine
     RL: RCT (Reactant); RACT (Reactant or reagent)
        (polyamine-based resin and paper coating compn. from
        the resin)
L276 ANSWER 18 OF 35 HCA COPYRIGHT 2009 ACS on STN
     131:290715 HCA Full-text
AN
    Process for synthesis of lignin quaternary ammonium salt cation
ΤI
    flocculant for water treatment
    Zhu, Wanpeng; Wu, Zhaohong; Yu, Gang
ΙN
    Qinghua University, Peop. Rep. China
PA
    Faming Zhuanli Shenging Gongkai Shuomingshu, 6 pp.
SO
    CODEN: CNXXEV
DT
    Patent
LA
    Chinese
FAN.CNT 1
                       KIND DATE APPLICATION NO.
    PATENT NO.
                                                            DATE
PI CN 1146999
                    A 19970409 CN 1996-106784
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CN 1045450 C 19991006 PRAI CN 1996-106784 19960712 <--

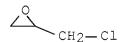
The process comprises dissolving 1 part lignin into 10-30 parts AB solvent to obtain soln. A; adding aldehyde and amine to A under stirring at the ratio of lignin to aldehyde being 1:(1.4-5.6) and the ratio of aldehyde to amine being 1:(0.5-1); adding strong acid catalyst (0-0.02 mol/g lignin) and reacting at 80-120° for 1-10 h; adding alkylate and reacting at 40-100° for 0.5-6 h at the ratio of amine to alkylate being 1:(1-3); and sepg. under reduced-pressure distn. to obtain the product. The 2nd step can be taken place by reacting aldehyde and amine to obtain methylene diamine first, then reacting methylene diamine with lignin. The solvent is selected from EtOH, DMSO, DMF, pyridine, and/or 1,4-dioxane. The amine is selected from ethylene diamine, diethylamine, dimethylamine, divinyl triamine, trivinyl tetramine, N-ethylamine piperazine, and/or piperazine. alkylate is selected from iodomethane, di-Me sulfate, 1,2dichloroethane, and/or epichlorohydrin.

IT 106-89-8, reactions 107-15-3, 1,2-Ethanediamine,
 reactions 110-85-0, Piperazine, reactions 111-40-0
 112-24-3 140-31-8, 1-Piperazineethanamine
 RL: NUU (Other use, unclassified); PEP (Physical, engineering or
 chemical process); RCT (Reactant); PROC (Process); RACT
 (Reactant or reagent); USES (Uses)

(process for synthesis of lignin quaternary ammonium salt cation flocculant for water treatment)

RN 106-89-8 HCA

CN Oxirane, 2-(chloromethyl) - (CA INDEX NAME)



RN 107-15-3 HCA

CN 1,2-Ethanediamine (CA INDEX NAME)

H2N-CH2-CH2-NH2

RN 110-85-0 HCA

CN Piperazine (CA INDEX NAME)

$$\text{HM} \text{NH}$$

RN 111-40-0 HCA

CN 1,2-Ethanediamine, N1-(2-aminoethyl)- (CA INDEX NAME)

H2N-CH2-CH2-NH-CH2-CH2-NH2

RN 112-24-3 HCA

CN 1,2-Ethanediamine, N1,N2-bis(2-aminoethyl)- (CA INDEX NAME)

RN 140-31-8 HCA

CN 1-Piperazineethanamine (CA INDEX NAME)

IC ICM C08H005-02

CC 60-3 (Waste Treatment and Disposal) Section cross-reference(s): 25, 61

IT 50-00-0, Formaldehyde, reactions 64-17-5, Ethanol, reactions 67-68-5, Dimethyl sulfoxide, reactions 68-12-2, Dimethylformamide, reactions 74-88-4, reactions 77-78-1, Dimethyl sulfate 106-89-8, reactions 107-06-2, reactions 107-15-3, 1,2-Ethanediamine, reactions 109-89-7, Diethylamine, reactions 110-85-0, Piperazine, reactions 110-86-1, Pyridine, reactions 111-40-0 112-24-3 123-91-1,

1,4-Dioxane, reactions 124-40-3, reactions 140-31-8,

1-Piperazineethanamine 9005-53-2, Lignin, reactions RL: NUU (Other use, unclassified); PEP (Physical, engineering or chemical process); RCT (Reactant); PROC (Process); RACT (Reactant or reagent); USES (Uses)

(process for synthesis of lignin quaternary ammonium salt cation flocculant for water treatment)

	rioccurant for water creatment,																	
AN TI IN PA SO	Use of aliphatic polyamines for reducing oxalate IN Holmes-Farley, Stephen Randall; Mandeville, W. Harry, III PA Geltex Pharmaceuticals, Inc., USA SO PCT Int. Appl., 42 pp. CODEN: PIXXD2																	
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FAN.																		
	PA:	CENT 1	. O <i>V</i>			KIN					APPL:	ICAT	ION :	NO.		D.	ATE	
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								NZ, UA,						SE,	SG,	SI,	SK,	
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	EP	1044008		A1	20001018	EP	1998-957371		
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	FP	1044008		R1	20060104		•		
	шт	R: BE, DE,							
	TD	2001521902				TD	2000 510676		
	JP	2001321902		1	20011113	JP	2000-310070		100010
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	EP	1645278		A2	20060412	EP	2005-76677		
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	ΕP	1645278		АЗ	20071114				
		R: AT, BE,	CH,	DE,	DK, ES, FR,	GB, GI	R, IT, LI, LU,	NL, S	E, MC,
		PT, IE,	SI,	LT,	LV, FI, RO,	MK, C	Y, AL		
	ΤW	585772					1998-87118238		
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	TIC	6177478		R1	20010123	IIC	1999-359226		
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	TTO	C0010E0		D 1	20010020	TTO	<		
	US	6281252		BI	20010828	US	2000-668874		20000
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	US	20010051660		A1	20011213	US	2001-891720		
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	US	20040018169		A1	20040129	US	2003-441157		
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PRAI	US	1997-964956		A	19971105	<			
		1998-957371		A3	19981026	<			
		1998-US22606		W	19981026	<			
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		2000-668874		A1	20000925	<			
		2000-891720		A1	20010626	<			
	CO	7001-031/70		AT	20010020	<u>_</u>			

A method is provided for reducing oxalate levels in a patient that AB includes administering to the patient a therapeutically effective amt. of non-absorbable amine polymers, e.g. a polymer characterized by a repeat unit [CH2CH((CH2)xNH2)]n, (n = pos.integer; x = 0-4) and salts and copolymers thereof. The invention is useful for reducing a patient's urinary output of oxalate and urinary calculi. Polymer prepn. is also described. 106-89-8, Epichlorohydrin, reactions ΙT RL: RCT (Reactant); RACT (Reactant or reagent) (crosslinking agent; polyamines, and prepn. thereof, for reducing oxalate) RN106-89-8 HCA CN Oxirane, 2-(chloromethyl) - (CA INDEX NAME) ΙT 107-15-3, Ethylenediamine, reactions 111-40-0 RL: RCT (Reactant); RACT (Reactant or reagent) (reaction; polyamines, and prepn. thereof, for reducing oxalate) 107-15-3 HCA RN 1,2-Ethanediamine (CA INDEX NAME) CN H2N-CH2-CH2-NH2 RN 111-40-0 HCA 1,2-Ethanediamine, N1-(2-aminoethyl)- (CA INDEX NAME) CN H2N-CH2-CH2-NH-CH2-CH2-NH2 ICM A61K031-785 IC CC 1-10 (Pharmacology) Section cross-reference(s): 35 ΙT 9024-97-9, Oxalate decarboxylase RL: BAC (Biological activity or effector, except adverse); BSU

(Biological study, unclassified); THU (Therapeutic use); BIOL

(Biological study); USES (Uses)

(copolymers contq.; polyamines, and prepn. thereof, for reducing oxalate) ΙΤ 106-89-8, Epichlorohydrin, reactions RL: RCT (Reactant); RACT (Reactant or reagent) (crosslinking agent; polyamines, and prepn. thereof, for reducing oxalate) 25034-58-6P, Acrylamide-methylenebisacrylamide copolymer ΙT 69824-22-2P, 2-Acrylamido-2-methylpropanesulfonic acid-methylenebisacrylamide copolymer 70144-13-7P RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses) (including oxalate decarboxylase; polyamines, and prepn. thereof, for reducing oxalate) 104-78-9DP, reaction products with Me methacrylate-divinylbenzene ΤТ copolymer 107-15-3DP, Ethylenediamine, reaction products with Me methacrylate-divinylbenzene copolymer 111-40-0DP, Diethylenetriamine, reaction products with Me methacrylate-divinylbenzene copolymer 306-60-5DP, Agmatine, copolymer reaction products 814-68-6DP, Acryloyl chloride, reaction products with polyethyleneimine 2482-00-0DP, Agmatine sulfate, copolymer reaction products 2582-30-1DP, Aminoquanidine bicarbonate, copolymer reaction products 4097-89-6DP, Tris(2-aminoethyl)amine, 9002-98-6DP, reaction products copolymer reaction products with acryloyl chloride or epichlorohydrin 9017-37-2DP, Methyl methacrylate-divinylbenzene copolymer, reaction 25610-84-8P, Aziridineproducts with amines epichlorohydrin copolymer 34369-44-3P, Epichlorohydrin-pentaethylenehexamine copolymer 66410-17-1P, Divinylbenzene-Vinylamine copolymer 71550-12-4P, Poly(allylamine) hydrochloride 95522-45-5P 132460-82-3P, Dimethylaminopropylacrylamide-methylene-bisacrylamide 152751-57-0P 154245-11-1P 162786-36-9DP, Divinylbenzene-methacryloyl chloride copolymer, agmatine sulfate reaction products 162786-36-9DP, Divinylbenzene-methacryloyl chloride copolymex, amine reaction products 198343-02-1P 198343-03-2P 198343-04-3P 224313-20-6DP, reaction products with agmatine 224313-15-9P 224313-23-9P RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses) (polyamines, and prepn. thereof, for reducing oxalate) 107-11-9D, Allylamine, derivs., polymers 124-02-7D, ΙT

Diallylamine, derivs., polymers 593-67-9D, Vinylamine, derivs., polymers 9003-01-4 9003-01-4D, derivs. 9003-05-8 9003-05-8D, derivs. 26336-38-9 26336-38-9D, derivs. 30551-89-4D, derivs. 30551-89-4 31245-56-4 31245-56-4D, 51382-06-0 51382-06-0D, crosslinked 52757-95-6 derivs. 138807-57-5 138807-57-5D, derivs. 157475-96-2 157475-96-2D, 198342-67-5 224313-04-6 crosslinked 224313-04-6D, crosslinked RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(polyamines, and prepn. thereof, for reducing oxalate)

5202-78-8P, Vinylacetamide 5335-91-1P, Ethylidenebisacetamide
9017-37-2P, Methyl methacrylate-divinylbenzene copolymer
147898-29-1P 162786-36-9P, Divinylbenzene-methacryloyl chloride
copolymer 224313-18-2P 224313-20-6P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation);
RACT (Reactant or reagent)

(prepn. and reaction; polyamines, and prepn. thereof, for reducing oxalate)

IT 60-35-5, Acetamide, reactions 75-07-0, Acetaldehyde, reactions 104-78-9 107-15-3, Ethylenediamine, reactions 111-40-0 306-60-5, Agmatine 814-68-6, Acryloyl chloride 2482-00-0, Agmatine sulfate 2582-30-1, Aminoguanidine bicarbonate 4097-89-6, Tris(2-aminoethyl)amine 6066-82-6, N-Hydroxysuccinimide RL: RCT (Reactant); RACT (Reactant or reagent)

(reaction; polyamines, and prepn. thereof, for reducing oxalate)
RE.CNT 12 THERE ARE 12 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L276 ANSWER 20 OF 35 HCA COPYRIGHT 2009 ACS on STN AN 130:67424 HCA

TI Development of migration study methods in compliance with directives of the European Union for studies of migration (and/or content) of low-molecular-weight substances from Polish plastics intended for contact with foods

L276 ANSWER 21 OF 35 HCA COPYRIGHT 2009 ACS on STN

AN 128:244737 HCA Full-text

OREF 128:48459a,48462a

TI Cure kinetics of novel tetrafunctional N-glycidyl epoxy xesin and their glass fiber-reinforced composite

AU Amin, Kamlesh G.; Patel, Kalpesh J.; Patel, Ranjan G.

CS Department of Chemistry, Sardar Patel University, Vallabh Vidyanagar, 388 120, India

SO Iranian Polymer Journal (1997), 6(4), 227-233 CODEN: IPJOFF; ISSN: 1026-1265

PB Polymer Research Center of Iran

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DT
     Journal
LA
     English
     The curing reactions of tetrafunctional epoxy resin N, N, N', N'-
AB
     tetraglycidyl-1,1'-bis[4-(p- aminophenoxy)phenyl]phenylmethane using
     different amine curing agents are studied by differential scanning
     calorimetry. The kinetics of the thermal degrdn. of cured epoxy
     resins are studied by thermogravimetry at a heating rate of 10 °C
     min-1. The overall activation energy for the curing reactions are
     obsd. to be in the range 76.0-386.1 kJ.mol-1. The glass fiber-epoxy
     resin composites are fabricated using the tetrafunctional N-glycidyl
     epoxy resin with the conventional epoxy resin DGEBA in the ratio
     20:80 using different amine curing agents and evaluating for their
     phys., mech., chem. and elec. properties.
     111-40-0, Diethylenetriamine 112-24-3
ΙT
     RL: PRP (Properties); RCT (Reactant); RACT (Reactant or
     reagent)
        (cure kinetics of tetrafunctional glycidyl epoxy resin
        and their glass fiber-reinforced composite)
RN
     111-40-0 HCA
CN
     1,2-Ethanediamine, N1-(2-aminoethyl)- (CA INDEX NAME)
H2N-CH2-CH2-NH-CH2-CH2-NH2
RN
     112-24-3 HCA
     1,2-Ethanediamine, N1,N2-bis(2-aminoethyl)- (CA INDEX NAME)
CN
H2N-CH2-CH2-NH-CH2-CH2-NH-CH2-CH2-NH2
ΙT
     106-89-8, reactions
     RL: RCT (Reactant); RACT (Reactant or reagent)
        (in prepn. of tetraglycidylbis[(aminophenoxy)phenyl]phenylmethane
        )
     106-89-8 HCA
RN
     Oxirane, 2-(chloromethyl)- (CA INDEX NAME)
CN
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CH₂-Cl

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37-6 (Plastics Manufacture and Processing)
CC
ST
     crosslinking kinetics epoxy resin; glass fiber epoxy
     resin composite
     Crosslinking kinetics
ΙT
        (cure kinetics of tetrafunctional glycidyl epoxy xesin
        and their glass fiber-reinforced composite)
     Glass fibers, uses
ΙT
     RL: MOA (Modifier or additive use); USES (Uses)
        (cure kinetics of tetrafunctional glycidyl epoxy resin
        and their glass fiber-reinforced composite)
ΙT
     Epoxy resins, preparation
     RL: POF (Polymer in formulation); PRP (Properties); RCT (Reactant);
     SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or
     reagent); USES (Uses)
        (cure kinetics of tetrafunctional glycidyl epoxy resin
        and their glass fiber-reinforced composite)
ΙT
     Bending strength
     Dielectric constant
     Dielectric loss
     Electric resistance
     Hardness (mechanical)
     Shear strength
        (of glass fiber-reinforced tetrafunctional glycidyl epoxy
        resin composite)
               101-77-9 111-40-0, Diethylenetriamine
ΙT
     80-08-0
     112-24-3
                1675-54-3
     RL: PRP (Properties); RCT (Reactant); RACT (Reactant or
     reagent)
        (cure kinetics of tetrafunctional glycidyl epoxy resin
        and their glass fiber-reinforced composite)
ΙΤ
     204994-41-2P, N,N,N',N'-Tetraglycidyl-1,1'-bis[4-(p-
     aminophenoxy)phenyl]phenylmethane homopolymer
                                                    204994-42-3P,
     Bisphenol A diglycidyl ether-4,4'-diaminodiphenyl
     sulfone-N, N, N', N'-tetraglycidyl-1, 1'-bis[4-(p-
     aminophenoxy)phenyl]phenylmethane copolymer
     204994-43-4P, Bisphenol A diglycidyl
     ether-4,4'-diaminodiphenylmethane-N,N,N',N'-tetraglycidyl-1,1'-bis[4-
     (p-aminophenoxy)phenyl]phenylmethane copolymer
     204994-44-5P, Bisphenol A diglycidyl
     ether-N, N, N', N'-tetraglycidyl-1, 1'-bis[4-(p-
     aminophenoxy)phenyl]phenylmethane-triethylenetetramine
                 204994-45-6P, Bisphenol A diglycidyl
     ether-diethylenetriamine-N, N, N', N'-tetraglycidyl-1, 1'-bis[4-(p-
     aminophenoxy)phenyl]phenylmethane copolymer
     RL: PRP (Properties); RCT (Reactant); SPN (Synthetic preparation);
     PREP (Preparation); RACT (Reactant or reagent)
```

```
(cure kinetics of tetrafunctional glycidyl epoxy resin
        and their glass fiber-reinforced composite)
     100-52-7, Benzaldehyde, reactions 106-89-8, reactions
ΙT
     108-95-2, Phenol, reactions
     RL: RCT (Reactant); RACT (Reactant or reagent)
        (in prepn. of tetraglycidylbis[(aminophenoxy)phenyl]phenylmethane
     204994-40-1P, N,N,N',N'-Tetraglycidyl-1,1'-bis[4-(p-
ΙT
     aminophenoxy) phenyl] phenylmethane
     RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation);
     RACT (Reactant or reagent)
        (prepn. and polymn. of)
             THERE ARE 14 CITED REFERENCES AVAILABLE FOR THIS RECORD
RE.CNT 14
             ALL CITATIONS AVAILABLE IN THE RE FORMAT
L276 ANSWER 22 OF 35 HCA COPYRIGHT 2009 ACS on STN
AN
     127:228839 HCA
ΤI
    Pharmaceutical agents containing perfluoroalkyl-containing metal
     complexes and the use thereof in tumor therapy and intervention al
     radiology
L276 ANSWER 23 OF 35 HCA COPYRIGHT 2009 ACS on STN
ΑN
    126:314517 HCA
    Novel affinity ligands and their use
ΤI
L276 ANSWER 24 OF 35 HCA COPYRIGHT 2009 ACS on STN
    125:34037 HCA Full-text
AN
OREF 125:6668h,6669a
    Preparation of soluble combinatorial libraries using soluble
ΤI
    macromolecular supports
    Janda, Kim; Han, Hyunsoo
ΙN
    Scripps Research Institute, USA
PA
    PCT Int. Appl., 154 pp.
SO
    CODEN: PIXXD2
    Patent
DT
LA
    English
FAN.CNT 1
    PATENT NO.
                       KIND DATE
                                          APPLICATION NO.
                                                                 DATE
     _____
     _____
    WO 9603418
                        A1 19960208
                                          WO 1995-US9614
PI
                                                                  199507
                                                                  26
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        W: AM, AT, AU, BB, BG, BR, BY, CA, CH, CN, CZ, DE, DK, EE, ES,
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FI, GB, GE, HU, IS, JP, KE, KG, KP, KR, KZ, LK, LR, LT, LU, LV, MD, MG, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG,

			SI,	SK,	ТJ,	TM,	TT										
		RW:	KE,	MW,	SD,	SZ,	UG,	AT,	BE,	CH,	DE	, DK,	ES,	FR,	GB,	GR,	IE,
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			MR,	NE,	SN,	TD,	TG										
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	ΕP	7726	23			A1		1997	0514]	ΕP	1995-	9293	34			
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	JP	R:	PT,	SE								•			LU,	MC,	NL,
	JP		PT,	SE								, IE,			LU,		NL,
	JP		PT,	SE								, IE,			LU,	1	
	JP		PT,	SE								, IE,			LU,	1	99507
		1050	PT, 6379	SE		Т		1998	0623	ı	JP	, IE, 1995-	5059	90	LU,	1	99507
		1050	PT, 6379	SE		Т		1998	0623	ı	JP	, IE, 1995-	5059	90	LU,	1 2	99507 6 99705
		1050	PT, 6379	SE		Т		1998	0623	ı	JP	, IE, 1995-	5059	90	LU,	1 2	99507 6
	US	10500	PT, 6379 0059	SE 826		Т		1998) 2003))623)327	1	JP US	, IE, 1995-	5059	90	LU,	1 2	99507 6 99705
PRAI	US	10500 20030	PT, 6379 0059	SE 826 200		T A1		1998)623)327	1	JP US	, IE, 1995- < 1997-	5059	90	LU,	1 2	99507 6 99705
PRAI	US US US	10500 20030 1994- 1995-	PT, 6379 00599	SE 826 200 153		T A1		1998 2003 1994 1995	0623 0327 0726 0607	\ <	JP US	, IE, 1995- < 1997-	5059	90	LU,	1 2	99507 6 99705
	US US US	10500 20030	PT, 6379 00599	SE 826 200 153		T A1		1998 2003 1994	0623 0327 0726 0607	\ <	JP US - -	, IE, 1995- < 1997-	5059	90	LU,	1 2	99507 6 99705
PRAI	US US US	10500 20030 1994- 1995-	PT, 6379 00599	SE 826 200 153		T A1 A		1998 2003 1994 1995	0623 0327 0726 0607	<	JP US - -	, IE, 1995- < 1997-	5059	90	LU,	1 2	99507 6 99705

* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

Novel sol. combinatorial libraries are prepd., comprising a sol. phase in soln. attached to a core mol., and allowing the improved high-yield and efficient prodn. of sol. combinatorial libraries. Some specific examples of the sol. combinatorial libraries claimed herein comprise one or more of the following: amino acids, α -azetide amino acids, triazine dione mols., γ -lactamtide mols. (constrained peptide mimics), δ -lactamthiotide mols. (constrained peptide mimics), β -lactam nucleus contg. mols., lycoramine alkaloid nucleus contg. mols., β -blocker nucleus mols., oligopeptides, oligosaccharides, oligonucleotides, and arylsulfonamides. The macromol. supports are

selected from polyethylene glycol, polyvinyl alc., polyvinylamine copolymd. with polyvinylpyrrolidine, and derivs. thereof. Further, a split synthesis technique for generating libraries of combinatorial mols. employs a biphasic macromol. support which is sol. during the pooling, splitting, and coupling steps but which is insol. during the washing step. The use of a biphasic macromol. support in its insol. phase significantly enhances the efficiency and performance of the washing step. Thus, a library of 8 tetrasaccharides (e.g. I, II, and III), useful as antigenic markers which distinguishes fetal erythrocytes from adult cells (no data), were prepd. by the split synthesis technique involving sequential coupling of a library of polyethylene glycol monomethyl ether-bound glucose and galactose derivs. (IV and V; R = MeO-PEG-O2CCH2CH2CO, wherein PEG = polyethylene glycol) (prepn. given) with (A) galactosamine and glucosamine derivs. (VI and VII) (prepn. given), (B) glucose and galactose derivs. IV and V(R = H) (prepn. given), and (C) galactosamine deriv. VI.

IT 100-46-9, Benzylamine, reactions 106-89-8, reactions 107-15-3, 1,2-Ethanediamine, reactions RL: RCT (Reactant); RACT (Reactant or reagent)

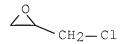
(prepn. of sol. combinatorial libraries using sol. macromol. supports)

RN 100-46-9 HCA

CN Benzenemethanamine (CA INDEX NAME)

 H_2N-CH_2-Ph

RN 106-89-8 HCA CN Oxirane, 2-(chloromethyl)- (CA INDEX NAME)



RN 107-15-3 HCA CN 1,2-Ethanediamine (CA INDEX NAME)

H2N-CH2-CH2-NH2

```
ICS C07K001-04
CC
    33-4 (Carbohydrates)
     Section cross-reference(s): 1, 26, 34
     50-99-7, D-Glucose, reactions 56-40-6, Glycine, reactions
ΙT
     59-23-4, D-Galactose, reactions 60-18-4, Tyrosine, reactions
     61-90-5, Leucine, reactions 62-53-3, Aniline, reactions
                                                                63-91-2,
     Phenylalanine, reactions 66-84-2, D-Glucosamine hydrochloride
     67-64-1, 2-Propanone, reactions 67-66-3, Chloroform, reactions
     69-65-8, D-Mannitol 74-88-4, Methyl iodide, reactions
                                                              75-29-6,
     2-Chloropropane
                      75-44-5, Phosgene
                                          78-77-3,
     1-Bromo-2-methylpropane 78-81-9, Isobutylamine
                                                       100-39-0, Benzyl
               100-44-7, Benzyl chloride, reactions 100-46-9,
     Benzylamine, reactions 106-89-8, reactions
     107-15-3, 1,2-Ethanediamine, reactions
                                            108-24-7, Acetic
     anhydride 108-30-5, Succinic anhydride, reactions 108-95-2,
     Phenol, reactions 115-11-7, Isobutylene, reactions
                                                           298-12-4,
     Glyoxalic acid 302-01-2, Hydrazine, reactions
                                                      504-29-0,
                     621-84-1, Benzyl carbamate 767-15-7,
     2-Pyridylamine
     2-Amino-4,6-dimethylpyrimidine 771-61-9, Pentafluorophenol
     943-45-3, 2-Phenoxyisobutyric acid 1125-88-8, Benzaldehyde
     dimethyl acetal
                      1772-03-8, D-Galactosamine hydrochloride
     2488-15-5
                4530-20-5 6752-38-1, 4-(Chlorosulfonyl)phenyl
                 6908-41-4, Methyl 4-(hydroxymethyl)benzoate
     isocyanate
     7664-41-7, Ammonia, reactions 13139-15-6
                                                13734-34-4
     24424-99-5, Di-tert-butyl dicarbonate 27079-92-1, 4-Hydroxybenzyl
              47689-67-8
                           86060-81-3
                                        90719-32-7 177797-26-1
     bromide
     177797-65-8
                   177797-66-9
                                177797-67-0
                                              177797-68-1 177797-91-0
     RL: RCT (Reactant); RACT (Reactant or reagent)
        (prepn. of sol. combinatorial libraries using sol. macromol.
        supports)
RE.CNT
        4
             THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD
             ALL CITATIONS AVAILABLE IN THE RE FORMAT
L276 ANSWER 25 OF 35
                     HCA COPYRIGHT 2009 ACS on STN
     124:194327 HCA
                     Full-text
AN
OREF 124:35679a,35682a
    Crosslinked polymers for removing bile salts from a
ΤI
     patient
    Mandeville, W. Harry, III; Holmes-Farley, Stephen Randall
IN
    Geltex Pharmaceuticals, Inc., USA
PA
    PCT Int. Appl., 73 pp.
SO
    CODEN: PIXXD2
DT
    Patent
LA
    English
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IC

FAN.CNT 14

ICM C07H021-00

F -	PATENT NO.				KIND DATE			APPLICATION NO.					DATE				
– I ₩	√O	 9534588				A1		19951221		WO 1995-US6542					199505 2 4		
		W:	FI, LV,	GB, MD,	GE, MG,	HU,	IS, MW,	BR, JP, MX,	KE,	KG,	KP,	KR,	KZ,	LK,	LR,	LT,	LU,
		RW:	IT,	LU,	MC,		PT,	AT, SE,									
Ū	JS	56249						1997	0429	Ī	US 1		2584	77		1 1	99406 0
<i>P</i> .	A U	9525	560			A		1996	0105		AU 1		2556	0		1 2	99505 4
		6947 7641				B2 A1		1998 1997]	EP 1:	< 995-:	9199	14		1 2	99505
E	ΞP	7641 R:	AT,	BE,				2001 ES,		GB,	GR,	<	IT,	LI,	LU,		
J	JP	1050	PT, 1264	SE		Т		1998	0203	ı	JP 1:	995-	5021	88		1 2	99505 4
R	RU	2146	266			C1		2000	0310]	RU 1	< 996-:	1248	22		1 2	99505 4
Z.	T	2055	8 (Т		2001	0915		AT 1:	< 99 5 -	9199	14		1 2	99505 4
F	łΚ	1001	611			A1		2004	1210]	HK 1:	< 998-	1005	31			99801
R a i u	JS	1994	-258	477		A		1994	0610	<	_	<				_	_

US 1993-71564 B2 19930602 <--WO 1995-US6542 W 19950524 <--

AB A method for removing bile salts from a patient by ion exchange involves administering to the patient a therapeutically effective amt. of ≥1 highly crosslinked polymers characterized by a repeat unit [CH2C(R1)(M)]n [n = integer; R1 = H, C1-C8 alkyl; M = C(O)ZR2, ZR2; Z = O, NR3, S, (CH2)m; m = 0-10; R3 = H, C1-C8 alkyl; R2 = (CH2)pN(R4)(R5), (CH2)pN+(R4)(R5)(R6); p = 0-10; R4, R5, R6 = H, C1-C8 alkyl, aryl] or copolymer thereof, the polymers being non-toxic and stable once ingested. Polymer prepn. is described. Polymers of the invention were efficacious in removing bile salts from artificial intestinal fluid.

IT 106-89-8, reactions 108-00-9 110-85-0,

Piperazine, reactions

RL: RCT (Reactant); RACT (Reactant or reagent) (crosslinked polymer prepn. for removing bile salts from a patient)

RN 106-89-8 HCA

CN Oxirane, 2-(chloromethyl)- (CA INDEX NAME)

RN 108-00-9 HCA

CN 1,2-Ethanediamine, N1,N1-dimethyl- (CA INDEX NAME)

Me2N-CH2-CH2-NH2

RN 110-85-0 HCA

CN Piperazine (CA INDEX NAME)

$$\mathsf{H} \mathsf{N} = \mathsf{N} \mathsf{H}$$

IC ICM C08F220-34 ICS C08F220-60; A61K031-785; A61K031-795

```
CC
    1-10 (Pharmacology)
    Section cross-reference(s): 35
ST
    bile salt removal crosslinked polymer prepn
ΙT
    Intestine
    Ion exchangers
        (crosslinked polymer prepn. for removing bile salts
        from a patient)
    Bile salts
ΙT
    RL: REM (Removal or disposal); PROC (Process)
        (crosslinked polymer prepn. for removing bile salts
        from a patient)
    Polymers, biological studies
ΙT
    RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
        (crosslinked; crosslinked polymer prepn. for removing
       bile salts from a patient)
    Alkylation
ΙT
        (agents, crosslinked polymer prepn. for removing bile
        salts from a patient)
    60-35-5, Acetamide, reactions 75-31-0, Isopropylamine, reactions
ΙΤ
    106-89-8, reactions 108-00-9 110-85-0,
                           629-27-6, 1-Iodooctane
    Piperazine, reactions
                                                     814-68-6, Acryloyl
    chloride
               920-46-7
                          3033-77-0, Glycidyltrimethylammonium chloride
                30030-25-2
     9002-98-6
    RL: RCT (Reactant); RACT (Reactant or reagent)
        (crosslinked polymer prepn. for removing bile salts
        from a patient)
    2210-25-5P
                 5202-78-8P 5335-91-1P, Ethylidenebisacetamide
ΙT
    26204-99-9P
                  28384-61-4P, n-Butylmethacrylamide
    Poly(vinylacetamide) 44986-83-6P 50325-49-0P
                                                       168270-38-0P
    RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation);
    RACT (Reactant or reagent)
        (crosslinked polymer prepn. for removing bile salts
        from a patient)
    106-89-8DP, reaction products with poly(ethyleneimine)
ΙΤ
                                                             629-27-6DP,
     1-Iodooctane, reaction products with crosslinked polymers
     9002-98-6DP, reaction products with epichlorohydrin
                                                          26336-38-9P,
    Poly(vinylamine)
                       100236-64-4DP, reaction products with
                   100236-64-4P 127339-84-8DP, reaction products with
     1-iodo-octane
     1-iodo-octane
                    127339-84-8P 132460-82-3P
                                                146894-57-7P
    160949-80-4P 160949-85-9P 174490-56-3P 174490-57-4P
     174490-58-5P 174490-59-6P 174490-60-9P 174490-61-0P
    174490-62-1P 174490-63-2P 174490-64-3P 174490-65-4P
    174490-66-5P 174490-67-6P 174490-68-7P 174490-69-8P
    174490-70-1P 174490-71-2P 174490-72-3P 174490-73-4P
     174490-74-5P 174490-75-6P 174490-76-7P 174490-78-9P
    174490-79-0P 174490-81-4P 174490-82-5P
    RL: SPN (Synthetic preparation); THU (Therapeutic use); BIOL
```

(Biological study); PREP (Preparation); USES (Uses) (crosslinked polymer prepn. for removing bile salts from a patient)

RE.CNT 9 THERE ARE 9 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

L276 ANSWER 26 OF 35 HCA COPYRIGHT 2009 ACS on STN

AN 117:191427 HCA

TI Functionalization of silica and its use as a catalyst: application of the modified silica for several nucleophilic reactions

L276 ANSWER 27 OF 35 HCA COPYRIGHT 2009 ACS on STN

AN 107:133910 HCA Full-text

OREF 107:21621a,21624a

TI Diquaternary ammonium salts, their preparation and their use as textile finishing agents

IN Topfl, Rosemarie; Abel, Heinz; Binz, Jorg

PA Ciba-Geigy A.-G., Switz.

SO Eur. Pat. Appl., 15 pp.

CODEN: EPXXDW

PRAI CH 1985-4801

DT Patent

LA German

FAN.CNT 1

FAN.	CNT 1 PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	 EP 221855	A2	19870513	EP 1986-810499	198611
	001055	- 0	10000511	<	03
	EP 221855 EP 221855	A3 B1	19900711		
	R: CH, DE, ES ZA 8608483	, FR, GE A		ZA 1986-8483	
					19861 1 07
	JP 62174042	A	19870730	< JP 1986-264917	
					198611 08
				<	
	JP 63028417	В	19880608		
	US 4906413	A	19900306	US 1988-270378	198811 10
				<	

A 19851108 <--

US 1986-925059 В1 19861030 <--AΒ H43C21C0Q1A1N+R1R2Z1N+R3R4A2Q2C0C21H43 3-n(Y1)n- [I; A1, A2 = C2-5] alkylene; Q1, Q2 = NH, O; R1, R2, R3, R4 = alkyl, hydroxy-, alkoxyalkyl with C1-4 in each alkyl; (Y1)n-= anion of a strong acid; Z1 = OH-substituted C3-24 alkylene with optional O interruption; n =1, 2], useful as textile auxiliaries, were prepd. by reaction of 1 mol H43C21C0Q1A1NR1R2 and 1 mol H43C21C0Q2A2NR3R4 with 1 mol X1Z'X2 [X1 = epoxy group, X2 = epoxy group or movable halo; Z' = C1-20 alkylene (un) substituted with OH and optionally with O interrupter; when X2 = epoxy, Z' = bond] in the presence of a strong acid H+n(Y1)n-. Behenic acid and Me2NCH2CH2NH2 reacted to give C21H43CONH(CH2)2NMe2 which was treated with concd. ECl in H2O and Me2CHOH, then with epichlorohydrin to give [C21H43CONH(CH2)2N+Me2CH2]2CHOH 2Cl-. Several examples involving treatment of textiles with I were given. 108-00-9 109-55-7 ΙT RL: RCT (Reactant); RACT (Reactant or reagent) (amidation by, of behenic acid) RN108-00-9 HCA 1,2-Ethanediamine, N1,N1-dimethyl- (CA INDEX NAME) CNMe2N-CH2-CH2-NH2RN 109-55-7 HCA 1,3-Propanediamine, N1,N1-dimethyl- (CA INDEX NAME) CN H2N-(CH2)3-NMe2

CH₂-Cl

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ΙC
    ICM C07C103-54
```

ICS C07C093-187; D06M013-46

23-18 (Aliphatic Compounds) CC

Section cross-reference(s): 40

Textiles ΙT

> (finishing agents for, behenoyl diquaternary ammonium compds.)

ΙT Quaternary ammonium compounds, preparation

RL: SPN (Synthetic preparation); PREP (Preparation) (di-, behenoyl, prepn. of, as textile finishing agents)

100-36-7 108-00-9 109-55-7 ΙT 121-05-1

53369-71-4

RL: RCT (Reactant); RACT (Reactant or reagent) (amidation by, of behenic acid)

106-89-8, Epichlorohydrin, reactions ΙT

> RL: RCT (Reactant); RACT (Reactant or resgent) (reaction of, with substituted behenamides)

HCA COPYRIGHT 2009 ACS on STN L276 ANSWER 28 OF 35

105:78646 HCA AN

1-Aryloxy-3-(substituted alkylamino)-2-propanols ΤI

L276 ANSWER 29 OF 35 HCA COPYRIGHT 2009 ACS on STN

ΑN 98:215838 HCA

Isoprenyl amine derivatives and their pharmaceutical compositions ΤΙ

L276 ANSWER 30 OF 35 HCA COPYRIGHT 2009 ACS on STN

97:39448 HCA ΑN

ΤI Determination of the polycondensation reaction heat in dynamic conditions

L276 ANSWER 31 OF 35 HCA COPYRIGHT 2009 ACS on STN

AN 93:186265 HCA

Antidepressant activity of cyclohexylphenoxymorpholines ΤI

HCA COPYRIGHT 2009 ACS on STN L276 ANSWER 32 OF 35

AN 87:70829 HCA

Substituted phenoxy propanol diamines and amino alcohol detergent ΤI additives for fuels and mineral oils

L276 ANSWER 33 OF 35 HCA COPYRIGHT 2009 ACS on STN

86:120879 HCA Full-text

OREF 86:19083a,19086a

ΤI Polyamines

Witzel, Bruce E.; Grier, Nathaniel; Dybas, Richard A.; Strelitz, ΙN Robert A.

PA Merck and Co., Inc., USA SO Ger. Offen., 57 pp. CODEN: GWXXBX DT Patent LA German FAN.CNT 1 PATENT NO. KIND DATE APPLICATION NO. DATE PI DE 2617672 A1 19761111 DE 1976-2617672 197604 23 <--US 4049417 19770920 US 1976-664612 A 197603 0.8 <--NO 7601279 A 19761029 NO 1976-1279 197604 13 <--NO 142259 B 19800414 NO 142259 С 19800723 SE 7604330 A 19761029 SE 1976-4330 197604 13 <--SE 434635 В 19840806 SE 434635 С 19841115 DK 7601725 A 19761029 DK 1976-1725 197604 14 <--NL 7603981 19761101 NL 1976-3981 A 197604 14 <--IL **494**37 IL 1976-49437 A 19801026 197604 19 <--19780125 GB 1976-16374 GB 1499056 Α 197604 22 <--CA 1083607 A1 19800812 CA 1976-251250

197604

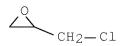
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	FR	2309511	A1	19761126	FR		1 97 604 26
						<	20
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							197604
							27
			_	10561110		<	
	JP	51128951	A	19761110	JP	1976-47908	
							197604
							28
						<	
	JP	61010458	В	19860329			
	US	1975-572592	A	19750428	<		
GI							

AB Algicidal, bactericidal, and fungicidal (no data) polyamines (16 compds.), such as I, were prepd. Thus, 1,5-bis(4-isopropylcyclohexyl)-3-pentanone was prepd. by treating β -pinene with Ac2O, reducing 3-(4-isopropylcyclohexenyl)propionic acid, treating 3-(4-isopropylcyclohexyl)propionic acid with Fe, and treating the resulting ketone with HN[(CH2)3NH2]2 to give I. IO6-89-8, reactions RL: RCT (Reactant); RACT (Reactant or reagent)

(reaction of, with cyclohexanebis (methylamine)

RN 106-89-8 HCA

CN Oxirane, 2-(chloromethyl)- (CA INDEX NAME)



```
56-18-8
ΙΤ
     RL: RCT (Reactant); RACT (Reactant or reagent)
        (reaction of, with cyclohexylalkanones)
RN
     56-18-8 HCA
     1,3-Propanediamine, N1-(3-aminopropyl)- (CA INDEX NAME)
CN
H_2N-(CH_2)_3-NH-(CH_2)_3-NH_2
    105-83-9 107-15-3, reactions 112-24-3
ΙT
     RL: RCT (Reactant); RACT (Reactant or reagent)
        (reaction of, with dicyclohexylalkanones)
     105-83-9 HCA
RN
     1,3-Propanediamine, N1-(3-aminopropyl)-N1-methyl- (CA INDEX NAME)
CN
            Ме
H_2N-(CH_2)_3-N-(CH_2)_3-NH_2
RN
    107-15-3 HCA
CN
     1,2-Ethanediamine (CA INDEX NAME)
H2N-CH2-CH2-NH2
RN
    112-24-3 HCA
     1,2-Ethanediamine, N1,N2-bis(2-aminoethyl)- (CA INDEX NAME)
CN
H2N-CH2-CH2-NH-CH2-CH2-NH-CH2-CH2-NH2
IC
    C07C087-14
CC
     24-5 (Alicyclic Compounds)
ΙT
     96-26-4
    RL: RCT (Reactant); RACT (Reactant or reagent)
        (alkylation by, of triazanonane deriv.)
     106-89-8, reactions
ΙT
     RL: RCT (Reactant); RACT (Reactant or reagent)
```

(reaction of, with cyclohexanebis (methylamine)

IT 56-18-8

RL: RCT (Reactant); RACT (Reactant or reagent) (reaction of, with cyclohexylalkanones)

IT 105-83-9 107-15-3, reactions 109-76-2

112-24-3 616-29-5

RL: RCT (Reactant); RACT (Reactant or reagent) (reaction of, with dicyclohexylalkanones)

L276 ANSWER 34 OF 35 HCA COPYRIGHT 2009 ACS on STN

AN 84:121718 HCA

TI Durable softening and water repellents. II. Syntheses of 1,2-disubstituted imidazoline compounds

L276 ANSWER 35 OF 35 HCA COPYRIGHT 2009 ACS on STN

AN 81:51056 HCA Full-text

TI Diester-amine adducts as fabric softeners

IN Schaefer, Paul; Ibrahim, Jutta; Gysin, Hanspeter

PA Ciba-Geigy A.-G.

SO Ger. Offen., 63 pp.

CODEN: GWXXBX

DT Patent

LA German

FAN.CNT 1

r AIN.	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE -
ΡΙ	DE 2341045	A1	19740307	DE 1973-2341045	197308 14
	СН 575909	A5	19760531	< CH 1972-12348	197208 21
	ZA 7305394	A	19740731	< ZA 1973-5394	1 9 7308 08
	AU 7359077	A	19750213	< AU 1973-59077	1 9 7308 0 9
	NL 7311206	A	19740225	< NL 1973-11206	1 9 7308 14

	US 3979442	A	19760907	US 1973-388525	105000
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	DE 002775	7) 1	10740220	<	
	BE 803775	A1	19740220	BE 1973-134723	197308
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				<	20
	FR 2196992	A1	19740322		
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	GB 1419154	A	19751224	GB 1973-39341	
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	11 1002508	В	19/60520	11 1973-32080	197308
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	AT 7307234	A	19761215		
					197308
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	AT 338224	В	19770810		
	SU 561507	А3	19770605	SU 1973-1959053	
					197308
					20
	JP 49057196	A	19740603	< JP 1973-93007	
	JP 49037196	А	19/40003	JP 1973-93007	197308
					21
				<	2 1
	JP 52047075	В	19771130	•	
PRAI	CH 1972-12348		19720821	<	
	CH 1973-11303		19730803		
AB	C12-22 alkyl esters	of ma	leic anhydr	ride or fumaric or itacon	ic acids

AB C12-22 alkyl esters of maleic anhydride or fumaric or itaconic acids were treated with di-, tri-, or pentaamines, optionally contg. OH groups, to give title adducts, which were optionally treated with epichlorohydrin [106-89-8] or propylene oxide [75-56-9], and used as fabric softeners in a quaternary ammonium or acid salt form. Thus, dioleyl maleate [105-73-7] was treated with N,N-bis(3-aminopropyl)methylamine [105-83-9] to give diester-amine adduct (I) [52031-38-6] which was mixed with water and %CO2% to give a stable colorless emulsion contg. I salt, that increased the softness of cotton tricot and sponge cloth 4 and 3.5 times, resp., that of untreated fabric.

```
ΙT
     112-57-2
     RL: RCT (Reactant); RACT (Reactant or reagent)
        (reaction of, with dioleyl maleate, in fabric softener manuf.)
RN
     112-57-2 HCA
     1,2-Ethanediamine, N1-(2-aminoethyl)-N2-[2-[(2-
CN
     aminoethyl)amino]ethyl]- (CA INDEX NAME)
H_2N-CH_2-CH_2-NH-CH_2-CH_2-NH-CH_2-CH_2-NH-CH_2-CH_2-NH-CH_2-CH_2-NH_2
ΙT
     105-83-9
     RL: RCT (Reactant); RACT (Reactant or reagent)
        (reaction of, with fatty acid esters of maleic acid, in fabric
        softener manuf.)
     105-83-9 HCA
RN
     1,3-Propanediamine, N1-(3-aminopropyl)-N1-methyl- (CA INDEX NAME)
CN
            Ме
H_2N - (CH_2)_3 - N - (CH_2)_3 - NH_2
     109-55-7
ΙΤ
     RL: RCT (Reactant); RACT (Reactant or reagent)
        (reaction of, with fatty esters of maleic acid, in fabric
        softener manuf.)
RN
     109-55-7 HCA
     1,3-Propanediamine, N1,N1-dimethyl- (CA INDEX NAME)
CN
H2N-(CH2)3-NMe2
ΤТ
     111-40-0
     RL: RCT (Reactant); RACT (Reactant or reagent)
        (reaction of, with fatty esters of unsatd. diacids, in fabric
        softener manuf.)
     111-40-0 HCA
RN
CN
     1,2-Ethanediamine, N1-(2-aminoethyl)- (CA INDEX NAME)
```

H2N-CH2-CH2-NH-CH2-CH2-NH2

```
ΙT
    106-89-8, reactions
     RL: RCT (Reactant); RACT (Reactant or reagent)
        (with diethylenetriamine-dioleyl maleate adduct, in fabric
        softener manuf.)
     106-89-8 HCA
RN
CN
     Oxirane, 2-(chloromethyl) - (CA INDEX NAME)
ΙT
     107-15-3, reactions
     RL: RCT (Reactant); RACT (Reactant or reagent)
        (with fatty esters of maleic acid, in fabric softener manuf.)
     107-15-3 HCA
RN
     1,2-Ethanediamine (CA INDEX NAME)
CN
H_2N-CH_2-CH_2-NH_2
ΙC
     C07C; D06M
CC
     39-10 (Textiles)
     Section cross-reference(s): 23
     DL-Aspartic acid, N,N'-(iminodi-2,1-ethanediyl)bis-, acetate, alkyl
ΙT
        alkenyl esters
     DL-Aspartic acid, N,N'-(iminodi-2,1-ethanediyl)bis-, formate, alkyl
        alkenyl esters
     DL-Aspartic acid, N,N'-1,2-ethanediylbis-, dimethyl phosphite, alkyl
        alkenyl esters
     DL-Aspartic acid, N,N'-1,2-ethanediylbis-, formate, alkyl alkenyl
        esters
     DL-Aspartic acid, N,N'-[(methylimino)di-3,1-propanediyl]bis-,
        formate, alkyl alkenyl esters
     DL-Aspartic acid, N,N'-[[(2-hydroxy-1-methylethyl)imino]di-2,1-
        ethanediyl]bis[N-(2-hydroxy-1-methylethyl)-, formate, alkyl
        alkenyl esters
       Formic acid, compd. with
        2,2'-[iminobis(2,1-ethanediyliminomethylene)]bis[butanedioic
        acid], alkyl alkenyl esters
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N, N'-(iminodi-2, 1-ethanediyl) bis [DL-aspartic acid], alkyl alkenyl
        esters
       Formic acid, compd. with
        N, N'-1, 2-ethanediylbis[DL-aspartic acid], alkyl alkenyl esters
       Formic acid, compd. with
        N, N'-[(methylimino)di-3,1-propanediyl]bis[DL-aspartic acid],
        alkyl alkenyl esters
       Formic acid, compd. with
        N, N'-[[(2-hydroxy-1-methylethyl)imino]di-2,1-ethanediyl]bis[N-(2-
        hydroxy-1-methylethyl)-DL-aspartic acid], alkyl alkenyl esters
       Formic acid, compd. with
        N-[3-(dimethylamino)propyl]-DL-aspartic acid, alkyl alkenyl
        esters
     Phosphorous acid, dimethyl ester, compd. with
        N, N'-1, 2-ethanediylbis[DL-aspartic acid], alkyl alkenyl esters
     RL: USES (Uses)
        (softening agents, for textiles)
     100-36-7 112-57-2
                        616-29-5
ΙT
                                    7803-57-8
     RL: RCT (Reactant); RACT (Reactant or reagent)
        (reaction of, with dioleyl maleate, in fabric softener manuf.)
ΙT
     105-83-9
     RL: RCT (Reactant); RACT (Reactant or reagent)
        (reaction of, with fatty acid esters of maleic acid, in fabric
        softener manuf.)
     109-55-7
ΙT
     RL: RCT (Reactant); RACT (Reactant or reagent)
        (reaction of, with fatty esters of maleic acid, in fabric
        softener manuf.)
ΙT
     111-40-0
     RL: RCT (Reactant); RACT (Reactant or reagent)
        (reaction of, with fatty esters of unsatd. diacids, in fabric
        softener manuf.)
ΙT
     75-56-9, reactions 106-89-8, reactions
     RL: RCT (Reactant); RACT (Reactant or reagent)
        (with diethylenetriamine-dioleyl maleate adduct, in fabric
        softener manuf.)
     107-15-3, reactions
ΙT
     RL: RCT (Reactant); RACT (Reactant or reagent)
        (with fatty esters of maleic acid, in fabric softener manuf.)
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Formic acid, compd. with